

An aerial photograph of a mountainous region, likely in the Pacific Northwest, showing a river winding through a valley and a large lake in the foreground. The terrain is covered in dense green forest, with some rocky outcrops visible. The sky is overcast with soft, white clouds.

# BRISTOL BAY

## COMPREHENSIVE ECONOMIC DEVELOPMENT STRATEGY

### 2011-2016

Funded by the U.S. Department of Commerce, Economic Development Administration

Sponsoring Organization: Bristol Bay Native Association

## Preface

The Bristol Bay Native Association (BBNA) has operated an Economic Development Program since 1975. During this time the local and regional planning processes have been enhanced and planning assistance to the communities has been improved. The Bristol Bay Comprehensive Economic Development Strategy Committee considers the comprehensive economic development strategy planning process very beneficial to the Bristol Bay region.

Over the past year and a half, the Bristol Bay Partnership sponsored the Bristol Bay Regional Vision Project with BBNA as the lead organization. The resulting Vision Statement reflects the shared values, opinions, and concerns of residents that gathered in meetings held in their community. Commissioners attended the meetings and prepared the regional vision statement (See the full Vision Statement on page 29).

Across a far-flung, diverse region with many cultural, economic, and social differences, people have strong agreement on their values and goals for the future. The Vision Statement celebrates this amazing unity on these matters:

- Family, connection to the Land and Water, and Subsistence Activities are the most treasured parts of peoples' lives today and they expect the same to be true 25 years from now.
- Enormous support for Wellness activities to fight the issues of substance abuse and domestic violence, abuse and neglect.
- A high priority for Quality Education to prepare youth with skills to succeed in college or vocational schools.
- An outstanding majority prefer Sustainable Economic Development based predominantly on Renewable Resources, and any large scale development must not threaten our land and waters.
- People strongly believe they can live healthy and productive lives here over the next 25 years.

This CEDS document identifies local economic priorities consistent with the values and goals of the people that live here. The resulting implementation strategies are designed to enhance the economy, create and retain jobs, protect the preferred lifestyle, while guarding the environment within the context of our "Vision."

Ralph Andersen  
President and Chief Executive Officer  
Bristol Bay Native Association

## Acknowledgements

### Funding Agency:



U.S. Department of Commerce,  
Economic Development Administration (EDA)

### Planning and Project Oversight: Bristol Bay Comprehensive Economic Development Strategy Committee

NAME	COMMUNITY	OCCUPATION	SEAT
Victor Seybert	Pilot Point	Fisherman	Seat A: Private Sector
Harry Wassily	Clarks Point	Fisherman	Seat B: Private Sector
Helen Gregorio	Togiak	Fisherman	Seat C: Private Sector
Dennis Andrew Sr.	New Stuyahok	Fisherman	Seat D: Private Sector
Patrick Kosbruk	Perryville	Fisherman	Seat E: Private Sector
Harvey Anelon	Iliamna	Retired	Seat F: Minority
Vacant			Seat G: Elder
Vacant			Seat H: Fish Processor
Lisa Wimmer	Dillingham	Wells Fargo Bank President	Seat I: Financial Institution
Vacant			Seat J: Public Figure
Carvel Zimin	South Naknek	Bristol Bay Borough	Seat K: Bristol Bay Borough
Jordon Keeler	King Salmon	Lake & Peninsula Borough	Seat L: Lake & Pen Borough
Alice Ruby	Dillingham	Mayor of Dillingham	Seat M: City of Dillingham
Erik O'Brien	Anchorage	Planner	Seat N: SWAMC
Robin Samuelsen	Dillingham	CEO	Seat O: BBEDC
Izetta Chambers	Dillingham	UAF Bristol Bay Campus	Seat P: Marine Advisory
Rae Belle Whitcomb	Dillingham	BBNA	Seat Q: Workforce Dev.
Ted Angasan	South Naknek	BBNA Chairman	Ex Officio
Ralph Andersen	Dillingham	BBNA Pres. & CEO	Ex Officio

**Sponsor: Bristol Bay Native Association**

Fred T. Angasan, Chairman of the Board  
Ralph Andersen, President & Chief Executive Officer  
Dee Dee Bennis, Chief Administrative Officer  
Patricia Heyano, Program Development Department Director  
Norman Anderson, Economic Development Program Manager  
Melody Nibeck, Tribal Energy Program Manager  
Thomas Woods, Media Services Specialist



**Other Project Support:**

Tribal Governments in Bristol Bay  
Village Native Corporations in Bristol Bay  
University of Alaska Fairbanks – Bristol Bay Campus  
Southwest Alaska Vocational and Educational Center  
Bristol Bay Economic Development Corporation  
Southwest Alaska Municipal Conference  
Lake and Peninsula Borough  
City of Dillingham  
Local business owners

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## ACRONYMS AND ABBREVIATIONS

ADF&G	Alaska Department of Fish and Game
ADOT	Alaska Department of Transportation
ANC	Anchorage
AK	Alaska
ANTHC	Alaska Native Tribe Health Consortium
BBAHC	Bristol Bay Area Health Corporation
BBB	Bristol Bay Borough
BBC	UAF, Bristol Bay Campus
BBEDC	Bristol Bay Economic Development Corporation
BBHA	Bristol Bay Housing Authority
BBNA	Bristol Bay Native Association
BBNA-CS	BBNA Community Services Department
BBNA-ED	BBNA Economic Development Program
BBNA-NR	BBNA Natural Resources Department
BBNA-PD	BBNA Program Development Department
BBNA-SS	BBNA Social Services Department
BBNA-TE	BBNA Tribal Energy Program
BBNA-WF	BBNA Workforce Development Department
BBNA-WI	BBNA Bristol Bay Wellness Initiative
BBNC	Bristol Bay Native Corporation
BBP	Bristol Bay Partnership of the 5 Tribally-directed Regional organizations
BBs	BBAHC, BBEDC, BBHA, BBNA, and BBNC
BLM	Bureau of Land Management
CERCLA	Comprehensive Environmental Response, Compensation and Liabilities Act
DCCED	Department of Community, Commerce and Economic Development
DEC	Department of Environmental Conservation
DEC/MGL	Department of Environmental Conservation/ Municipal Grants and Loans
DEED	Department of Education and Early Development
DHSS	Department of Health and Social Services
DLG	Dillingham
DOT/PF	Department of Transportation & Public Facilities
EPA	U.S. Environmental Protection Agency
GCI	General Communication Inc. (Telecommunication)
HUD	Housing and Urban Development
L&PB	Lake and Peninsula Borough
NEA	Naknek Electric Association
NUSH	Nushagak Cooperatives (Telecommunication, Electricity, Cable TV)
RAPIDS	Community Capital Project Database
SAVEC	Southwest Alaska Vocational and Education Center
School Districts	Bristol Bay, Dillingham, Lake & Peninsula, and Southwest Region
Tribes	The 31 Tribes in the Region
USDA- RD	United States Department of Agriculture-Rural Development
Utilities	Various Electrical and Telecommunication providers in the Region
VSW	Village Safe Water Program

## INTRODUCTION

This Bristol Bay Comprehensive Economic Development Strategy (BBCEDS) is the result of planning efforts by the Strategy Committee, tribally enrolled members, and others concerned for the future of the Region.

The Region is characterized by its abundance of natural resources, geographic isolation and pristine ecosystems, but also high unemployment, high cost of living, and high energy costs. The soaring costs motivated participants at the 2006 Bristol Bay Action Summit to identify the high cost of fuel as, “Public Enemy Number One.” The Region has gotten little relief from exorbitant fuel costs since then. High fuel costs drive the costs of all products and services up and hinder the economy, which affects the availability of jobs and investments in the Region.

During the Bristol Bay Regional Vision Project, many people stated that a lack of opportunities was the major economic constraint. Rather than concentrating on the high costs, they were more concerned with stimulating the economy to be able to pay for the things they need. Since few jobs are available, small business development is highly regarded as an excellent source of new personal income. People acknowledged that the main limitation of small business development is the lack of capital along with the high cost of energy, lack of infrastructure, long distance to markets, and better connectivity.

The commercial fishing industry is a multi-million dollar industry that saw 31 million fish harvested in 2010 with an ex-vessel value of 153 million dollars. A majority of households in the Region are involved in commercial fishing in one form or another. Commercial fishing is the historical mainstay of the economy, but a number of factors affect its value to the local economy, including politics, value of the US dollar against the Japanese Yen (et.al), international finance, over capitalization, increasing debt loads, farmed fish, high fuel costs, waning fish stocks, poor fish returns to the rivers and streams, interception on the high seas, and changing food choices in traditionally salmon consuming countries. These issues coupled with the restrictions in the Limited Entry Permit system have decreased the number of locally owned permits, which increases the number of people unable to participate and left on the fringe.

This CEDS attempts to help mitigate the effects of high fuel costs and limited entry permit losses and enhance opportunities in small business development, including tourism and eco-tourism.

### BRISTOL BAY CEDS

The Bristol Bay CEDS promotes sustainable economic development within the Bristol Bay Region in a collaborative approach to improve in the economy. The BBCEDS: 1) Fosters a more stable and diversified economy; 2) Creates and sustains employment opportunities and regional investments; 3) Strengthens the skills and qualifications of the workforce; and 4) Improves the quality of life throughout the region

The Bristol Bay Region has one of the highest unemployment and poverty rates in Alaska. Basic infrastructure development is a major need in the Region. There are agencies that provide assistance and funding to relieve economic distress, but further proactive planning and development is needed to become more self-sufficient and sustainable.

#### Partners and Projects

The BBCEDS is guided by locally driven initiatives in partnership with the local, state and federal government to stimulate economic development and produce healthy, sustainable local economies. These collaborations help the Bristol Bay Region achieve its goals and objectives.

#### Municipal Governments

- First and Second Class Cities provide services and programs.
- Boroughs provide services and programs.

#### State Government:

- Updated community profiles are provided through the State of Alaska Department of Commerce, Community & Economic Development, Division of Community and Regional Affairs (DCRA)
- Alaska Department of Fish and Game (ADF&G) manages resources.

#### Federal Government:

- Economic Development Administration (EDA) provides the Planning Grant to update and implementation the CEDS.
- Department of Interior, Fish and Wildlife Service, Togiak National Wildlife Refuge manages wildlife.

#### Alaska Native Organizations and Tribal Governments:

The Bristol Bay Partnership is a partnership of the five Regional Organizations, four of which are Tribally directed organizations, which work together on projects and initiatives of mutual interest:

- Bristol Bay Native Corporation (BBNC), a major land owner and investor.
- Bristol Bay Economic Development Corporation (BBEDC), the Community Development Quota (CDQ) holder that makes fisheries related investments in the Region.
- Bristol Bay Housing Authority (BBHA) receives HUD and other funds to improve housing.

- Bristol Bay Area Health Corporation (BBAHC), the major healthcare provider.
- Bristol Bay Native Association is a human services organization serving Tribes and their members.
- Tribes provide programs and services or compact with other providers to serve the needs of their Tribal members.

**What is a CEDS?**

A Comprehensive Economic Development Strategy (CEDS) is the result of an ongoing planning process that studies local economic conditions, identifies problems and opportunities, sets goals and objectives, coordinates implementation activities, and evaluates accomplishments. A CEDS identifies community needs and provides development strategies that coordinate the different efforts to yield efficiencies. A CEDS facilitates a unified effort to create jobs, raise income levels, diversify the economy, and improve the quality of life while protecting the environment. It adopts a logical process for long-range development while actively working on short-range problem solutions.

**Development of the CEDS**

Throughout the fall and winter of 2010-2011 the Bristol Bay Regional Vision Project traveled to 27 of 31 villages and held meetings attended by nearly 1,000 residents in the region. The pertinent results are conveyed in the BBCEDS. In addition, the Economic Development Program Manager traveled to the villages and talked with residents about economic development. The opportunity was used to visit with members of the Strategy Committee. Other data was also compiled for the BBCEDS through Strategy Committee meetings, research, and surveys.

## GEOGRAPHIC DESCRIPTION

The Bristol Bay Region is located in Southwest Alaska and covers 46,573 square miles, roughly the size of Ohio. The Regional boundaries were defined in the Alaska Native Claims Settlement Act of 1971. It is outlined by three mountain ranges with the Kilbuck Mountains to the northwest, the Taylor Mountains to the north, and the Aleutian Range to the east along the Alaska Peninsula. From these mountains, the Becharof Lake, Naknek Lake, Lake Iliamna, Lake Clark and Wood Tikchik Lakes are formed and flow into the eight major river systems: the Togiak River, Wood River, Nushagak River, Kvichak River, Naknek River, Egegik River, Ugashik River, Meshik River, and Chignik River reaching the sea on the Bristol Bay and Pacific coastlines. The habitat is pristine, intact and unchanged for thousands of years offering countless breathtaking vistas. Most of lowlands are covered with moist spongy tundra, with scattered Birch, Cottonwood, Willow and Spruce Trees.

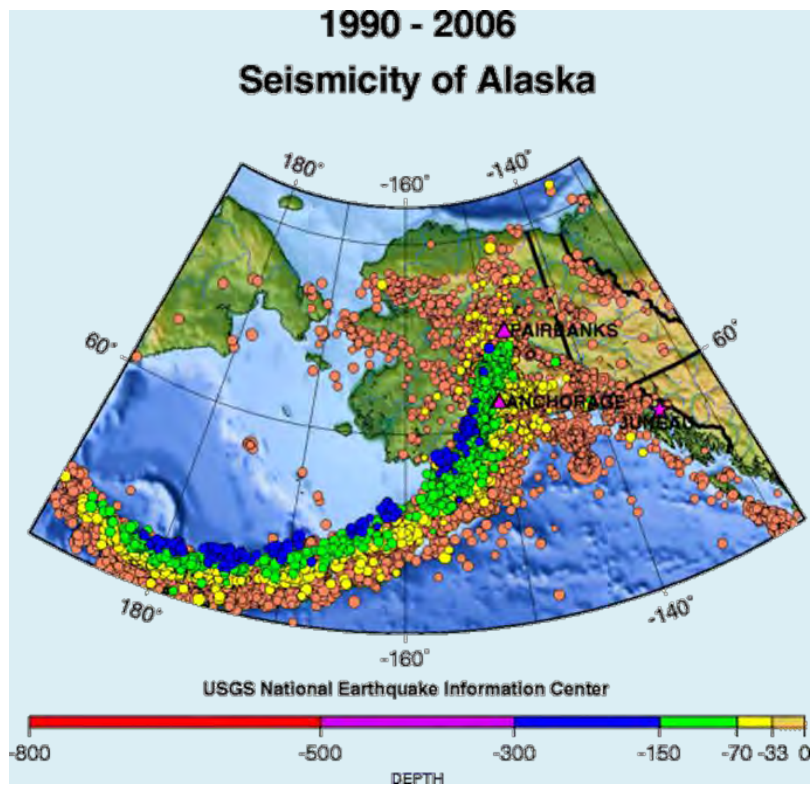
The topography was created by the action of two tectonic plates, where the Pacific Plate is subducted under the North American Plate at an angle of nearly 45 degrees forming the Aleutian Trench. The area has seismic activity and a number of active volcanoes.

### Maps

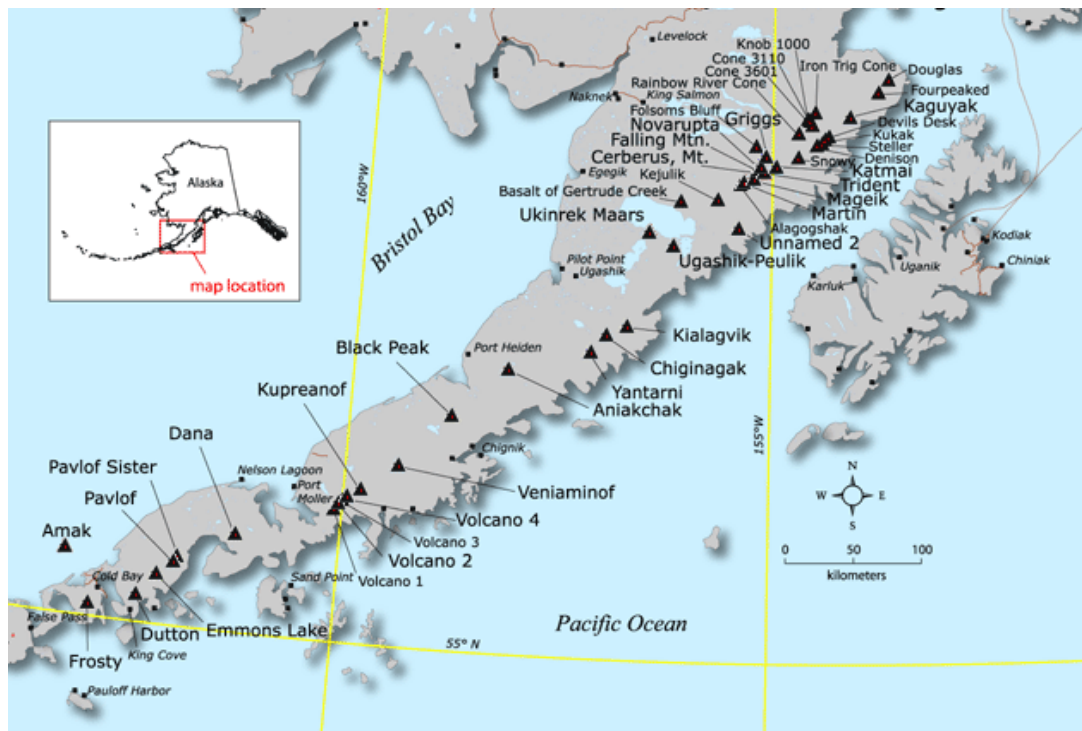


## Seismicity Map

Purple Triangles: Cities  
 Purple Star: Capital City  
 Circles: Earthquakes (color represents depth range)  
 Depth is in kilometers  
 Earthquake locations are from the USGS/NEIC PDE catalog.



## Volcanology Map



### Climate

Much of life in rural Alaska is influenced by extreme weather conditions and a cold climate. The Bristol Bay Region spans three different climatic zones: the Arctic Climate of the interior, the Maritime Climate of the coastal areas, and a Transitional Climatic zone in between.

**Inland (Arctic) Zone**, average temperatures can range from 42 to 64 degrees F in the summer and 3 to 30 degrees F in winter. Average annual precipitation ranges from 26-32 inches including 64-89 inches of snow.

In the **Maritime Zone**, average summer temperatures range from 42 to 63; average winter temperatures range from 4 to 44, although the wind chill factors are substantial on the coast. Average annual precipitation is 20 inches annually, including 45-93 inches of snowfall. Weather on the Alaskan coast is generally described as cool, windy, and wet year-round with foggy summers.

The **Transitional Zone** average summer temperatures range is from 30 to 66; winter temperatures range from below zero to 30. Annual precipitation ranges from 20 to 35 inches and summers are generally foggy and cloudy.

Rivers in the Bristol Bay region are ice-free from June through mid-November (Alaska State Division of Community and Regional Affairs (DCRA) Community Database). Potential impacts from the future warming of the region's climate have not been fully analyzed. Preliminary data collected from local residents suggest that a warming climate has already had some impact on wildlife behavior (Fall 2006).

## LOCAL GOVERNMENT

Each of the 31 villages in the Bristol Bay region has a Tribal government managed by Tribal Councils, which is the traditional and customary form of government in Alaska. The Federally recognized Tribes have a special political government-to-government relationship with the United States. The U.S. meets the contractual obligations attached through the Department of Interior, Bureau of Indian affairs and other Federal Agencies that provide assistance to Tribes. The Tribes provide their membership infrastructure, healthcare, social services, Tribal courts, housing, economic development, and cultural projects. BBNA represents the Tribes collectively and regionally, and assists them on a variety of social and economic matters.

Village	Tribe
Aleknagik	Aleknagik Traditional Council
Chignik Bay	Chignik Bay Tribal Council
Chignik Lagoon	Chignik Lagoon Village Council
Chignik Lake	Chignik Lake Traditional Council
Clarks Point	Clarks Point Village Council
Dillingham	Curyung Tribal Council (Dillingham)
Egegik	Egegik Village Council
Ekuk	Ekuk Village Council
Ekwok	Ekwok Village Council
Igiugig	Igiugig Village Council
Iliamna	Iliamna Village Council
Ivanof Bay	Ivanof Bay Village Council
Kanatak	Kanatak Tribal Council
King Salmon	King Salmon Tribal Council
Kokhanok	Kokhanok Tribal Council
Levelock	Levelock Tribal Council
Manokotak	Manokotak Village Council
Naknek	Naknek Tribal Council
New Koliganek	New Koliganek Tribal Council
New Stuyahok	New Stuyahok Tribal Council
Newhalen	Newhalen Tribal Council
Nondalton	Nondalton Tribal Council
Pedro Bay	Pedro Bay Tribal Council
Perryville	Native Village of Perryville (Perryville)
Pilot Point	Pilot Point Tribal Council
Port Heiden	Port Heiden Village Council
Portage Creek	Portage Creek Village Council
South Naknek	South Naknek Village Council
Togiak	Togiak Traditional Council
Twin Hills	Twin Hills Village Council
Ugashik	Ugashik Traditional Council

## Bristol Bay Comprehensive Economic Development Strategy

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The State of Alaska is a P.L. 280 state which means that there is concurrent jurisdiction by the State and Tribes. Historically, it has been an antagonistic relationship since they compete for the same inhabitants and resources.

The State spent many years refusing to recognize the existence of Tribes, but Governor Tony Knowles corrected it with Administrative Order 186 on September 29, 2000 that stated Tribes Existed before the formation of the United States and the State of Alaska. The Order recognizes the important contribution that Alaska's Tribes make; the positive impact of Tribal funds on the State's economy and its citizens. It acknowledged the Tribes' authority and responsibility to deliver social, economic, cultural, and other programs and services. The Order's goal was to develop a constructive and harmonious relationship between the Tribal and State governments, which is still being perfected within individual departments and programs.

BOROUGH/CENSUS AREA	VILLAGE	INCORP TYPE
<b>Dillingham Census Area:</b>	Aleknagik	2nd Class City
<b>(Unorganized Borough)</b>	Clark's Point	2nd Class City
	Dillingham	1st Class City
	Ekuk	Unincorporated
	Ekwok	2nd Class City
	Koliganek	Unincorporated
	Manokotak	2nd Class City
	New Stuyahok	2nd Class City
	Portage Creek	Unincorporated
	Togiak	2nd Class City
	Twin Hills	Unincorporated
<b>Bristol Bay Borough:</b>	King Salmon	Unincorporated
	Naknek	Unincorporated
	South Naknek	Unincorporated
<b>Lake &amp; Peninsula Borough</b>	Chignik	2 <sup>nd</sup> Class City
	Chignik Lagoon	Unincorporated
	Chignik Lake	Unincorporated
	Egegik	2 <sup>nd</sup> Class City
	Igiugig	Unincorporated
	Iliamna	Unincorporated
	Ivanof Bay	Unincorporated
	Kokhanok	Unincorporated
	Levelock	Unincorporated
	Newhalen	2nd Class City
	Nondalton	2nd Class City
	Pedro Bay	Unincorporated
	Perryville	Unincorporated
	Pilot Point	2nd Class City
	Port Heiden	2nd Class City
	Ugashik	Unincorporated

The State of Alaska's Constitution, Article X, Section 2, provides that two forms of local government, cities and organized boroughs, form the basic structure of Alaska's Municipal Government. Both cities and boroughs are municipal corporations and political subdivisions of the State of Alaska. (AS 29.04.010 -.020)

Thirteen (13) of the communities in the Bristol Bay Region have a State chartered city government. The City of Dillingham is the only 1<sup>st</sup> Class City; and the others are 2<sup>nd</sup> Class Cities. There are two Boroughs and one Unorganized Census Area in the Region: 1) Bristol Bay Borough with three communities; 2) Lake and Peninsula Borough with seventeen communities; and 3) Dillingham Census Area with eleven communities. Borough Assemblies and City councils oversee municipal finances and tax collection, public works, fire and police departments, libraries, senior services, utilities and other services.

## LAND OWNERSHIP

### Federal Lands

The largest land owners in the Bristol Bay region are the Federal and State governments and the Native Corporations. Most of the federal managed lands are managed as national parks, preserves and wildlife refuges. The U.S. Fish and Wildlife Service manage four Wildlife refuges: Alaska Maritime, Alaska Peninsula, Aniakchak, Becharof, and Togiak. The National Park Service manages Lake Clark National Park and Preserve, the Katmai National Park and Preserve, and the Aniakchak National Monument and Preserve. The Bureau of Land Management manages federal land outside of these conservation lands.

Stretching from the Arctic Ocean to the southeast panhandle, the **Alaska Maritime National Wildlife Refuge** protects breeding habitat for seabirds, marine mammals and other wildlife on more than 2,500 islands, spires, rocks and coastal headlands. Some of these isolated islands host unique species not found elsewhere. This Refuge may be the frontier where the next new bird or plant will be discovered.

**Alaska Peninsula National Wildlife Refuge** is a land of towering mountains, active volcanoes, broad valleys, fjords, tundra and glacially formed lakes. The Bristol Bay side of the Refuge consists primarily of flat to rolling tundra, lakes and wetlands. From these coastal lowlands, the land rises to steep glaciated mountains, forming the spine of the Refuge, and then plunges to steep cliffs and sandy beaches on the Pacific side. Several of the Refuge's volcanoes have been active in the recent past. Mt. Chiginigak last erupted in 1971 and continues to vent gases and steam. Mt. Veniaminoff, a massive strato-volcano with a base 30 miles in diameter and a summit crater 20 miles in circumference, erupted from 1993 to 1995. Mt. Veniaminoff has the most extensive crater glacier in the country and is the only known glacier on the continent with an active volcanic vent in its center.

**Aniakchak National Monument and Preserve** is a U.S. National Monument and Preserve, consisting of the area around the Aniakchak volcano on the Aleutian Range. The area was proclaimed a national monument on December 1, 1978, and established as a national monument and preserve on December 2, 1980. The national monument is 137,176 federal acres and the preserve is 465,603 acres of which 439,863 are federal. The area is maintained by the National Park Service. With only 285 documented recreational visits in 2004, this remote place is perhaps the least visited unit of the National Park System. Most visitors fly into the area, but the frequent fog and other adverse weather conditions make landing difficult.

The Aniakchak region is part of the Pacific Ring of Fire, and the national monument consists of the caldera around Mount Aniakchak, with notable examples of several volcanic features - such as lava flows and cinder cones. Surprise Lake, located within the caldera, is the source of the Aniakchak River, a National Wild and Scenic River. The Aniakchak Bay Historic Landscape District surrounds the Aniakchak River from Aniakchak Crater to Aniakchak Bay and was listed on the National Register of Historic Places on February 14, 1997.

**Becharof National Wildlife Refuge** is a land of towering mountains, active volcanoes, broad valleys, fjords, tundra and glacially formed lakes. The Bristol Bay side of the Refuge consists primarily of flat to rolling tundra, lakes and wetlands. From these coastal lowlands, the land rises to steep glaciated mountains, forming the spine of the Refuge, and then plunges to steep cliffs and sandy beaches on the Pacific side. The Refuge contains Becharof Lake, which at approximately 300,000 acres, is the largest fresh water lake in the National Wildlife Refuge System. Mt. Peulik, a 4,800-foot volcano with lava flows reaching Becharof Lake is a prominent landmark.

With terrain that varies from sheer mountain peaks and sea cliffs to open stretches of tundra and wetlands, **Togiak National Wildlife Refuge** has many distinctive habitats that provide homes to all sorts of wildlife. The vast 4.7 million acres of the refuge are defined and divided by river drainages. There are 35 river systems here, the most prominent of which are the Kanektok, Goodnews, and Togiak rivers. The rivers are the lifeblood of the region, totaling over 1,500 miles of stream and river habitat, and serving as transportation pathways for animals and humans.

**Lake Clark National Park and Preserve** is a U.S. National Park that includes many streams and lakes vital to the Bristol Bay salmon fishery. The park allows a wide variety of recreational activities year-round. Lake Clark is on the Alaska Peninsula, southwest of Anchorage, and has a variety of features not found together in any of the other Alaska Parks: the junction of three mountain ranges, (the Alaska Range from the North, the Aleutian Range from the South, and the park's own rugged Chigmit Mountains, an area known as Alaska's Alps.), two active volcanoes (Iliamna and Redoubt), a coastline with rainforests on the East (similar to Southeast Alaska), a plateau with tundra on the West (similar to Arctic Alaska), and turquoise lakes. There are no roads and it can only be reached by small aircraft, preferably floatplane. The park is 4,480 square miles and one of the least visited National Parks averaging just over 5,000 visitors per year.

**Katmai National Park & Preserve** protects the Valley of Ten Thousand Smokes, a spectacular forty square mile, 100 to 700 foot deep ash flow deposited by Novarupta Volcano in the early 1900's. There are at least fourteen active volcanoes within the national park; most recently Fourpeaked Volcano became active in September 2006 after more than 10,000 years of dormancy. Katmai is still famous for volcanoes, but also for brown bears, pristine waterways with abundant fish, remote wilderness, and a rugged coastline. The park covers 7,383 square miles, being roughly the size of Wales. Most of the park, 5,288 square miles, is a designated wilderness area. This park contains numerous archaeological sites which indicate a long history of prehistoric occupations. Activities at Katmai include hiking, backpacking, camping, backcountry skiing, fishing, kayaking, boat tours, and interpretive programs. The vast majority of Katmai visitors visit Brooks Camp, the only developed area of the park, and few venture further than the bear viewing platforms.

## **State Lands**

State Land is located in the Wood Tikchik State Park, the Nushagak and Iliamna drainages and the Bay side of the Alaska Peninsula. All tidal and submerged lands three

miles offshore and the beds of inland navigable water bodies are owned by the State. The State maintains two conservation units, the Walrus Game Sanctuary and the Wood Tikchik State Park.

**Wood-Tikchik State Park** is located north of Dillingham. Over 1.6 million acres (6,500 km<sup>2</sup>) in area—about the size of the state of Delaware, it is the largest state park in Alaska and also the largest state park in the nation. It is one of only two state parks in western Alaska, along with the 5-acre Lake Aleknagik State Recreation Site that is located on the Aleknagik Lake south shore with road access from Dillingham.

The **Walrus Game Sanctuary** is seven small, isolated islands in Bristol Bay that host the largest annual land-based walrus haul out in the Western Hemisphere. Each spring, 2,000 to 10,000 male walruses bask on the rocky beaches of Round Island for days at a time. Steller sea lions have a rookery nearby and gray whales swim offshore along the coast. In spring and summer, red foxes feed and play on the island slopes. Hundreds of thousands of seabirds, including kittiwakes, murres, puffins, cormorants, parakeet auklets, and pigeon guillemots breed along the island's shores during the summer. Viewing is by permit only, from May 1 to August 15. Five-day permits allow camping on Round Island and are obtained from ADF&G in Dillingham on a first-come, first-served basis. Visitors must be self-sufficient, in good physical condition, and prepared for inclement weather.

### Municipal Lands

Boundaries are established through the Local Boundary Commission. The Commission's role is to receive, review, and make final decisions on petitions for: Incorporation; Reclassification; Annexation; Detachment; Dissolution; Mergers; and Consolidation of cities, boroughs, and unified municipalities.

MUNICIPALITY	INCORP TYPE	LAND (sq. miles)	WATER (sq. miles)
Bristol Bay Borough	Borough	504.9	382.8
Lake & Peninsula Borough	Borough	23,782	7,125
City of Aleknagik	2nd Class City	11.6	7.2
City of Chignik	2nd Class City	11.7	4.2
City of Clarks Point	2nd Class City	3.1	0.9
City of Dillingham	1st Class City	33.6	2.1
City of Egegik	2nd Class City	32.8	101.2
City of Ekwok	2nd Class City	16.0	1.4
City of Manokotak	2nd Class City	36.4	0.9
City of New Stuyahok	2nd Class City	32.6	2.0
City of Newhalen	2nd Class City	6.1	2.3
City of Nondalton	2nd Class City	8.4	0.4
City of Pilot Point	2nd Class City	25.4	115.1
City of Port Heiden	2nd Class City	50.7	0.7
City of Togiak	2nd Class City	45.2	183.3

## Native Corporation Lands

Formed as a result of the Alaska Native Claims Settlement Act (ANCSA), the Bristol Bay Native Corporation (BBNC) owns a large amount of land in the Bristol Bay region. In addition, each village selected lands in its vicinity and formed Village Corporations obtaining the surface rights. BBNC owns the lands that it selected and controls the subsurface rights of Village Corporation owned land. The vast majority of the land remains undeveloped, with subsistence being the primary use.

### Bristol Bay Region ANCSA Facts

- Total Land area within the ANCSA regional boundaries: 34 million acres
- Bristol Bay ANCSA conveyance surface and subsurface: 101,500 acres
- Total Statewide ANCSA conveyance subsurface: 2,716,000 million acres
- 5,401 Original shareholders in December 1971; today there are approximately 9,000
- 12a lands are original village land selections; 12b lands were redistributed by BBNC.

VILLAGE	CORPORATION NAME	ANCSA VILLAGE LAND (Acres)		
		12a	12b	Total
Aleknagik	Aleknagik Natives Limited	115,200	3,140	118,340
Chignik	Far West Inc.	115,200	3,886	119,086
Chignik Lagoon	Chignik Lagoon Native Corp	92,160	3,306	95,466
Chignik Lake	Chignik River Limited	92,160	7,801	99,961
Clarks Point	Saguyak Inc.	92,160	18,788	110,948
Dillingham	Choggiung Limited	161,280	14,226	175,506
Egegik	Becharof Corp	92,160	2,310	94,470
Ekuk	Choggiung Limited.	69,120	7,680	76,800
Ekwok	Ekwok Natives Limited	92,160	1,522	93,682
Igiugig	Igiugig Native Corp	69,120	503	69,623
Iliamna	Iliamna Native Corp	69,120	3,939	73,059
Ivanof Bay	Bay View Inc.	69,120	12,382	81,502
Kokhanok	Kokhanok Native Corp	92,160	9,667	101,827
Koliganek	Koliganek Natives Limited	92,160	3,910	96,070
Levelock	Levelock Natives Limited	92,160	4,611	96,771
Manokotak	Manokotak Natives Limited	115,200	10,420	125,620
Naknek	Paug-Vik Inc. Limited	115,200	13,509	128,709
New Stuyahok	Stuyahok Limited	115,200	3,752	118,952
Newhalen	Newhalen Native Corp	69,120	2,406	71,526
Nondalton	Kijik Corp	115,200	11,210	126,410
Pedro Bay	Pedro Bay Corp	92,160	4,842	97,002
Perryville	Oceanside Corp	92,160	1,766	93,926
Pilot Point	Pilot Point Native Corp	92,160	6,777	98,937
Port Heiden	Meshik Inc.	69,120	0	69,120
Portage Creek	Choggiung Limited	69,120	61,553	130,673
South Naknek	Qinuyang Limited	92,160	0	92,160
Togiak	Togiak Natives Limited	138,240	18,397	156,637
Twin Hills	Twin Hills Native Corp	69,160	830	69,990
Ugashik	Ugashik Native Corp	69,120	1,011	70,131

## SOCIOECONOMIC DATA

There are two types of regional economies, seasonal and year around. The two main transportation hubs, King Salmon and Dillingham, have fairly stable year around economies with commercial fishing, salmon processing, transportation, and government jobs providing employment. For the other communities, commercial fishing and subsistence activities are seasonal, and few other employment options exist. The salmon season lasts three months (late May through August) and the salmon returns and prices fluctuate seasonally, so the economic conditions of these communities vary.

<b>Bristol Bay Population Village</b>	<b>Native People Living Locally</b>	<b>Total Population</b>
Aleknagik	185	219
Chignik Bay	55	91
Chignik Lagoon	64	78
Chignik Lake	64	73
Clarks Point	57	62
Dillingham	1418	2329
Egegik	84	109
Ekuk	0	0
Ekwok	108	115
Igiugig	42	50
Iliamna	63	109
Ivanof Bay	7	7
Kanatak	0	0
King Salmon	113	374
Kokhanok	154	170
Levelock	66	69
Manokotak	419	442
Naknek	256	544
New Koliganek	183	209
New Stuyahok	490	510
Newhalen	173	190
Nondalton	148	164
Pedro Bay	27	42
Perryville	111	113
Pilot Point	58	68
Port Heiden	80	102
Portage Creek	2	2
South Naknek	66	79
Togiak	757	817
Twin Hills	70	74
Ugashik	10	12
<b>TOTAL</b>	<b>5330</b>	<b>7223</b>
<i>Alaska FY 2010 Population Determination.</i>		

The for-profit Native Village Corporations, non-profit Village Councils, and Regional Native Organizations are somewhat new and a few of them are good economic performers. After the 1971 Native Claims Settlement Act (ANCSA), Native Village Corporations were formed to invest and manage funds and land conveyances within the region. Regional Native Nonprofit Organizations provide community, health, educational, social, housing, land, workforce development, natural resource management, and economic development assistance.

## **Cultural History**

Three of Alaska's major indigenous groups - Yupiit, Alutiiq and Athabascan have lived in the region since time immemorial. Generally, the people inhabiting the Lake Iliamna subregion are Dena'ina Athabascan, the watershed/coastal subregions between Togiak and the Northern Alaska Peninsula are Yupiit, and the southern Alaska Peninsula subregion are Alutiiq.

Traditionally, these societies were nomadic and movement in and out of the region and between communities was common. Although recorded contact with Europeans began in 1741 in Alaska, Russians did not begin exploring the Bristol Bay Region until 1818. The U.S. purchased the Alaska territory in 1867. American policy forced the Alaska Natives to settle in year around communities shortly afterward.

Yup'ik Alaska Native elders have identified the following critical drivers of socioeconomic and sociocultural change in their communities since contact with Europeans and Americans: disease epidemics, reorganization of residential patterns and relations between men and women, prohibition of many important sociopolitical and religious ceremonies, management schemes imposed on natural resources, and restrictions by missionaries and educators on the use of Alaska Native languages (Pete in Barker 1993). The introduction of alcohol and disease decimated many rural Alaska communities and continues to have a detrimental effect on Alaska's rural economy and culture.

## **Education**

There are four school districts in the region that provide primary and secondary education and receive supplemental funds from Federal grants and programs such as Johnson O'Malley, Migrant Education, and Indian Education. They include: The Bristol Bay School District, the Lake & Peninsula School District, Dillingham City School District and the Southwest Region School District. There is a Head Start operated by BBNA that provides early learning opportunities for young children. There is a private Seventh Day Adventist Church School in Dillingham, and numerous online home school options. Post-secondary education is provided by the University of Alaska Fairbanks-Bristol Bay Campus and the Southwest Alaska Vocational Education Center.

Most communities in the Region have a primary school, and fewer communities have a high school. Many schools in the Bristol Bay Region are small, some with 20 or fewer students with a range of grade levels in one classroom. If school enrollment drops

below 10 students, the school is closed, and people typically move to a larger community. School closure causes a rapid decline in the village. In communities without a high school, students go to boarding schools or boarding homes in communities with a high school. In most villages, schools serve as community centers for large community gatherings.

**BBNA Head Start** operates in the communities of Dillingham, New Stuyahok, Manokotak and Togiak. Head Start is a federally-funded comprehensive early childhood program for children age's three to five and their families. It provides the children of these communities with a quality kindergarten readiness program that provides the tools they need for a successful school career. Cultural awareness is of utmost importance in the Head Start classrooms, the teachers provide cultural activities based on the subsistence calendar.

Head Start works with families on goal setting in coordination with BBAHC, SWRSD, TANF, Manokotak Natives Limited, and other village based resources that provide training and support to families. They encourage parents and community members to volunteer in the local Head Start centers, which can lead to job skills and greater understanding of the importance of participating in their child's education.

**Dillingham City School District** consists of an elementary school, middle/high school, and Maximum Achievement Program (MAP) school. The Dillingham Elementary School has an enrollment of 237, and the Middle/High School has 275.

**Bristol Bay Borough School District** serves the communities of Naknek, King Salmon, and South Naknek. Students from King Salmon are bused to Naknek and the South Naknek children are flown across the river.

**Lake and Peninsula School District (LPSD)** serves the communities of Chignik Bay, Chignik Lagoon, Chignik Lake, Pedro Bay, Egegik, Iguigig, Kokhanok, Levelock, Port Heiden, Newhalen, Nondalton, Perryville, Pilot Point, and Port Alsworth.

**Southwest Region School District (SWRSD)** began operations as a State funded Rural Educational Attendance Area (REAA) in 1976. SWRSD's Central Office is located in Dillingham and serves nine village schools: Aleknagik, Clarks Point, Ekwok, Koliganek, Manokotak, New Stuyahok, Portage Creek, Togiak, and Twin Hills.

**Mt. Edgecumbe High School (MEHS)** is a State run public boarding high school located in Sitka, Alaska. Originally administered by the Bureau of Indian Affairs, the school was transferred to the State of Alaska in the 1980s. Mt. Edgecumbe expanded from 370 students to 420 students in 2004 and projects a long-term enrollment of 450. The school typically has 140 openings every year with 300+ students applying. As of 2005, over 100 Alaskan communities are represented at MEHS including communities from Bristol Bay.

**Southwest Alaska Vocational & Education Center (SAVEC)** provides innovative, customized, rapid response, high quality training and skill development. SAVEC and its partners help businesses, regional organizations, village councils, government agencies, and other organizations develop and deliver workforce development programs that increase jobs in the region. It is one of the most advanced classroom technology centers in the state utilizing Smart Board Technology, Audio Conferencing, Video Conferencing (VTC), Distance Education, and Wireless Networking throughout its facility. SAVEC's outdoor laboratory makes a perfect setting for programs such as Heavy Equipment

Operator Training, Construction Truck Operations (CDL) and Driver's Education allowing students hands-on experience.

**University of Fairbanks-Bristol Bay Campus** located in Dillingham provides post-secondary opportunities with a satellite office in Naknek. They offer a broad range of courses that are available by audio conference to 32 villages. It offers vocational/technical and academic courses on campus. Students include those who have had no college, those returning to college work, those holding baccalaureates but seeking refresher studies, and those actively seeking a graduate degree. Most Bristol Bay Campus students go to school part-time because they have jobs, children, or other community responsibilities. 43% of the students are between the ages of 31 and 40. Alaskan Natives make up 54% of the Campus student body with 40% of those Alaskan Native women.

## Employment Data

### 2009 Quick Facts

- About 65 percent of the resident population that is 16 years old or older worked in 2009.
- Local Government was the main industry in 2009, employing 41 percent of the area's workers.
- More workers employed as Teacher Assistants in Dillingham Census Area than other occupation.
- More workers employed as General Office Clerks in Bristol Bay Borough than any other occupation.
- More workers employed as Construction Laborers in Lake & Pen Borough than any other occupation.

### Unemployment

	12/2010	01/2011	02/2011	03/2011
<b>Dillingham Census Area</b>				
UI Claimants**	207	239	251	242
Unemployment Rate (Not seasonally adjusted)	11.8%	11.5%	11.3%	11.5%
<b>Bristol Bay Borough</b>				
UI Claimants**	43	47	46	41
Unemployment Rate(Not seasonally adjusted)	9.2%	11.0%	11.2%	10.3%
<b>Lake and Peninsula Borough</b>				
UI Claimants**	99	123	128	126
Unemployment Rate (Not seasonally adjusted)	10.8%	12.4%	12.8%	11.8%
<b>BRISTOL BAY REGION COMPILED UNEMPLOYMENT</b>				
UI Claimants**	349	409	425	409
Unemployment Rate (Not seasonally adjusted)	10.6%	11.6%	11.77%	11.2%
**UI claimants are individuals in this area who had an active claim at any time during the month.				

### Job Sources



### 2009 Employment Snapshot

Description	Dillingham Census Area	Bristol Bay Borough	Lake & Pen Borough	REGION TOTALS
<b>Working Age Residents</b>				
Residents age 16+	3,308	780	1,169	5,257
<b>Resident Worker Characteristics</b>				
Total	2,109	507	758	3,374
Male	1,030	227	404	1,661
Female	1,079	230	354	1,663
Age 45+	855	267	304	1,426
Age 50+	599	188	199	986
<b>Unemployment</b>				
UI Claimants	421	77	215	713
<b>New Hires</b>				
New hires	846	200	381	1,427
<b>Wages</b>				
Total wages	\$57,355,047	\$18,865,039	\$15,967,366	\$92,187,452
<b>Resident Workers by Sector</b>				
Private	1,234	342	313	1,889
State government	110	22	8	140
Local government	765	143	437	1,345
<b>Quarterly Number of Resident Workers</b>				
Peak (2nd) quarter workers	1,771	455	613	2,839
Percent working all 4 quarters	61.8%	63.7%	51.6%	59.0%
<b>Construction Occupation Experience (05-09)</b>				
Some construction	317	86	235	638
At least 1 year construction	102	31	79	212
At least 2 years construction	34	20	19	73
Worked in an <b>AGIA</b> occupation	1,740	428	774	2,942

There is distinction between the local/regional employment data and the "standard" employment series. Most data reflect totals for area residents only. Total worker counts may be lower than expected in areas with large numbers of nonresident workers. The Alaska Permanent Fund dividend file is used to determine the worker's geographic residence. Only Alaska residents (defined by PFD application) are included in these totals. Note that federal employees, the military, and the self-employed are not included in these data. The number of residents age 16+ is derived from PFD applicant information. Population estimates are calculated using a model relying on PFD information as one input, and also the relationship between the PFD applicants at the time of the US census with the census count and other variables. For some places, the number of PFD applicants may exceed the estimated number of residents. An asterisk (\*) means data are suppressed. Numbers may not sum due to rounding. **AGIA** (Alaska Gasline Inducement Act) means the occupation has been identified as a core occupation involved in the Gasline project.

Commercial fishing and subsistence are the primary economic activities in the Bristol Bay Region during the summer and are not often reflected in the employment data. During the off season, unemployment levels increase due to few employment alternatives. Commercial fishers do not pay into the unemployment system and are not eligible for unemployment benefits. Other seasonal workers draw unemployment and exhaust their benefits before they find other work or the new season starts again. The semi-retired and those that have given up on looking for work do not show up in the unemployment system. Some previous analysis figures the real off season unemployment rate is over 30 percent.

### Income and Poverty Levels

AMERICAN COMMUNITY SURVEY – 2000 CENSUS				
	Dillingham	Bristol Bay	Lake & Pen	Combined
Median Age	28.9	36	29.2	31.4
Average Family Size	3.8	3.3	3.7	3.6
Average Household Size	3.2	2.6	3.1	3.0
Per Capita Income	\$16,021	\$22,210	\$15,361	\$17,864
Median Family Income	\$45,391	\$59,868	\$42,313	\$49,191
Median Household Income	\$43,079	\$52,167	\$36,442	\$43,896
<i>The ACS 2010 Census data is not available, yet.</i>				

POVERTY GUIDELINES – Health and Human Services (HHS)		
Size of Family Unit	48 Contiguous States and D.C.	Alaska
<b>1</b>	\$10,890	\$13,600
<b>2</b>	14,710	18,380
<b>3</b>	18,530	23,160
<b>4</b>	22,350	27,940
<b>5</b>	26,170	32,720
<b>6</b>	29,990	37,500
<b>7</b>	33,810	42,280
<b>8</b>	37,630	47,060
<b>each additional person, add</b>	3,820	4,780

According a report by the National Center for Children in Poverty, families typically need an income twice the official poverty level (\$55,880 for a family of four in Alaska) to meet basic needs. The findings are due to the “high-cost of living.” The current poverty measure was established in the 1960s and is now widely acknowledged to be flawed. It was based on research indicating that families spent about one-third of their incomes on food. Since then, the figures have been updated annually for inflation but otherwise remain unchanged. The current poverty measure is flawed in three ways:

- Food now comprises only one-seventh of an average family's expenses, while the costs of housing, childcare, healthcare, and transportation have grown disproportionately.
- The current poverty measure is a national standard that does not adjust for substantial variation in cost of living from state to state and between urban and rural areas.
- When determining income, sources include earnings, interest, dividends, Social Security, and cash assistance, which is counted before subtracting taxes, earned Income Tax Credit, food stamps, Medicaid, housing, and childcare assistance, which overstates income for some families, and underestimates it for others.

### Cost of Living

The high cost of living and high energy prices are a large factor in living in rural Alaska. The *2008 Alaska Geographic Differential Study* commissioned by the Alaska Department of Administration statically compares the cost of living in selected communities and geographical areas (sample blocks) throughout the state with Anchorage. The study surveyed housing, food, transportation, clothing, and medical care expenses - to name a few - using two primary research tasks, a Household Consumption Survey and a Retail Price Survey. The Aleutian Region was the most expensive sample block with costs at 1.5 percent higher than Anchorage. The most expensive sample blocks in the Bristol Bay region were the Bethel/Dillingham area with costs at 1.49 percent higher and the Southwest Small Communities with costs at 1.44 percent higher than Anchorage. The *2008 Alaska Geographic Differential Study* clearly proves communities "off the road system" in the state of Alaska experience the greatest cost of living relative to Anchorage and the communities along the Railbelt region of the state.

#### Geographical Cost Differentials, 2008 Selected Communities

Barrow	1.50
Bethel	1.53
Cordova	1.13
Dillingham	1.37
Homer	1.01
Ketchikan	1.04
Kotzebue	1.61
Nome	1.39
Petersburg	1.05
Sitka	1.17
Unalaska/Dutch Harbor	1.58
Valdez	1.08

Source: *Geographic Differential Survey*, Prepared by McDowell Group, in association with ECO northwest, & GMA Research Corporation, 2008



Heating Fuel #1 Prices per Gallon							
	Gulf Coast	Interior	Northern	Northwest	Southeast	Southwest	Western
High	\$6.86	\$10.00	\$2.60	\$11.26	\$6.06	\$7.86	\$7.27
Low	\$4.19	\$4.00	\$1.40	\$3.99	\$4.25	\$3.65	\$4.27
Average	\$5.00	\$5.60	\$1.74	\$5.93	\$4.89	\$5.68	\$5.75

Heating Fuel #1 Prices per Gallon – Communities Surveyed in Bristol Bay Region							
	Chignik	Dillingham	Clark's Point	Kokhanok	New Stuyahok	Nondalton	Togiak
Price	\$3.65	\$5.73	\$6.00	\$7.86	\$5.88	\$6.88	\$6.00

The retail prices per gallon for gasoline also vary by region around the state. The prices ranged from a low of \$4 (Kaktovik) in the Northern region to a high of \$10 (Arctic Village) in the Interior region. The statewide average reported at \$5.75. In the Bristol Bay region, seven communities were surveyed: Chignik, Dillingham, Clark's Point, Kokhanok, New Stuyahok, Nondalton and Togiak. The prices ranged from a low of \$3.65 (Chignik) to a high of \$7.86 (Kokhanok). The average for the selected communities surveyed in the Bristol Bay region calculated at \$6.18 per gallon.

Gasoline Prices per Gallon							
	Gulf Coast	Interior	Northern	Northwest	Southeast	Southwest	Western
High	\$7.07	\$10.00	\$9.20	\$7.73	\$6.01	\$8.00	\$7.79
Low	\$4.22	\$4.04	\$4.00	\$4.55	\$4.13	\$4.30	\$5.09
Average	\$5.04	\$5.89	\$5.39	\$5.93	\$4.87	\$5.90	\$6.41

Gasoline Prices per Gallon – Communities Surveyed in the Bristol Bay Region							
	Chignik	Dillingham	Clark's Point	Kokhanok	New Stuyahok	Nondalton	Togiak
Price	\$4.30	\$5.99	\$6.00	\$8.00	\$6.05	\$7.19	\$5.78

The 2011 *Current Communities Conditions: Fuel Prices across Alaska* report concluded the following:

*These increased fuel and energy costs, combined with high unemployment rates, limited local economies, and local governments struggling to provide basic local services, continue to present rural Alaska communities and households with challenging circumstances.*

The *Statistical Report of the Power Cost Equalization (PCE) Program for Fiscal Year 2010* reports on the cost of electricity for customers participating in the PCE program in rural areas where costs are typically higher than the urban parts of the state. The program allows for eligible utilities and residential customers of those utilities to receive a reduced rate on the first 500 kWh consumed in an effort to “equalize” the cost of electricity with other parts of the state. The report estimates about 78,431 people from 185 communities and 84 utilities around the state participated in the program in FY 2010.

In the Bristol Bay Region, 18 utilities representing 24 communities participated in the program. Clark’s Point, Chignik Lake and Ugashik did not participate. The reported average residential rate, PCE, and effective residential rates varied for the region.

Village	Average Residential Rate	PCE Rate	Effective Residential Rate
Aleknagik	34.05	18.68	15.37
Chignik Bay	44.87	29.48	15.39
Chignik Lagoon	40.00	25.88	14.12
Dillingham	34.05	18.68	15.37
Egegik	62.84	24.11	38.73
Ekwok	50.00	35.88	14.12
Igiugig	80.30	48.80	31.50
Iliamna	59.82	25.81	34.01
King Salmon	51.49	22.62	28.87
Kokhanok	90.00	47.44	42.56
Koliganek	50.00	35.88	14.12
Levelock	70.00	38.60	31.40
Manokotak	55.00	29.37	25.63
Naknek	51.49	22.62	28.87
New Stuyahok	63.81	41.73	22.08
Newhalen	59.82	25.81	34.01
Nondalton	59.82	25.81	34.01
Pedro Bay	91.00	46.57	44.43
Perryville	95.00	24.41	70.59
Pilot Point	50.00	35.88	14.12
Port Heiden	75.00	29.71	45.29
South Naknek	51.49	22.62	28.87
Togiak	56.99	35.25	21.74
Twin Hills	55.00	30.10	24.90
Source: <i>Statistical Report of the Power Cost Equalization Program, Fiscal Year 2010, July 1, 2009 – June 30, 2010, Twenty Second Edition, March 2011, Alaska Energy Authority.</i>			

### **Cash and Subsistence Economy**

Rural Alaska has a mixed economy of cash and subsistence. Combining cash-paying jobs and subsistence activities is the way most households sustain themselves. Most importantly, subsistence activities (hunting, fishing, berry picking, preserving food and sharing) are part of the Alaska Native culture. Both the subsistence activities themselves and the sharing among families and friends have significant cultural, social and economic value.

“Subsistence” is the term used to refer to the gathering of wild resources for food and other personal necessities. Historically, all human beings survived by subsistence but most of mankind now has replaced these activities with the division of labor, specialization, and trade. Alaska and Federal law define subsistence as the “customary and traditional uses” of wild resources for food, clothing, fuel, transportation, construction, art, crafts, sharing, and customary trade. “Customary and traditional” includes harvesting food, the collection of materials for traditional crafts, and trade.

Bristol Bay Region residents, both Native and non-Native harvest wild resources as an important part of their livelihood and culture. These subsistence harvests of fish and game represent a significant portion of the diet and takes priority over other uses of the resources such as sport and commercial fishing. Subsistence hunting and fishing is a central part of family activities, and is significant to the regional economy.

The Alaska Department of Fish and Game estimated in 2000 that among remote rural households (including both Alaska Native and non-Native households), 60% harvest game and 80% harvest fish and that several hundred pounds are harvested annually per person. But the U.S. Census Bureau reported in 2000 that most households in the remote rural region, 85% of Alaska Native, and 93% of non-Native, also had at least some cash income from wage work; therefore, given the large subsistence harvests and the prevalence of wage-work, remote rural households routinely combine cash and subsistence.

There’s also an “informal” economy based on customary trade, not captured in statistics. Families and neighbors trade services, share goods, or make cash payments not reported to the IRS. Such activities outside the standard market economy go on nationwide, but they are especially important the Bristol Bay Region, where both cash and local businesses are scarce. Small remote communities can’t support most of the service businesses found in urban areas. The informal customary trade economy increases the economic well-being of rural households’.

### **Alaska Native Arts and Crafts**

Many local artisans continue to use arts and crafts to supplement their cash needs. The items exhibit life and tradition in many types of media and styles. It is sold at local stores, festivals, gatherings, and holiday art and craft bazaars. Ivory carving, woodworking, grass basketry, skin sewing, beading, and painting are popular art forms that can be found. The art of dogsled building is still practiced in the Region. Statewide

gatherings such as the annual Alaska Federation of Natives Convention provides an opportunity for artists to sell elaborately decorated skin sewn parkas, mukluks, cleverly designed ivory figurines, and ornately fashioned beaded jewelry and hangings.

### Local Taxes

Municipality	Property Tax (mils)	Sales Tax	Bed Tax	Fish Tax	Other Taxes
Bristol Bay Borough	13.0	None	10%	4%	None
Lake and Peninsula Borough (L&PB)	None	None	6%	2%	\$3 person/day guide tax; \$1 person/day lodge tax
City of Aleknagik	None	5%	5%	None	None
City of Chignik	None	None	6%	2%	*L&PB Taxes
City of Clarks Point	None	5%	None	None	None
City of Dillingham	13.0	6%	10%	None	10% Alcohol
City of Egegik	None	None	None	3%	*L&PB Taxes
City of Ekwok	None	None	None	None	None
City of Manokotak	None	2%	None	None	None
City of New Stuyahok	None	None	None	None	None
City of Newhalen	None	2%	None	None	* L&PB Taxes
City of Nondalton	None	3%	None	None	* L&PB Taxes
City of Pilot Point	None	3%	None	3%	* L&PB Taxes
City of Port Heiden	None	None	None	None	* L&PB Taxes
City of Togiak	None	2%	None	2%	None
*L&PB Taxes: 6% Bed Tax; 2% Fish Tax; \$3 person/day guide tax; \$1 person/day lodge tax.					

## PHYSICAL INFRASTRUCTURE

### Transportation

The region is remote with no roads, accessible by air and water only. Large state-owned airports provide regular daily, year-around jet flights from Anchorage to the hubs at Iliamna, Dillingham and Naknek/King Salmon. A seaplane base is available 3 miles west of Dillingham owned by the U.S. Bureau of Land Management. A heliport is available at Kakanak Hospital. Several small airlines provide local air charter and cargo flights.

There are barge landings, and boat launch/haul-out facilities in several coastal communities. The City of Dillingham operates a small seasonal boat harbor and all-tide dock. Two freight barge lines make scheduled trips from Seattle and Anchorage. Some freight is sent from Anchorage with a large percentage coming in from Seattle.

There are three short inter-community roads that connect Dillingham to Aleknagik; Naknek to King Salmon; and Iliamna to Newhalen. Due to the lack of infrastructure, travel between communities is usually by small plane, and seasonally by boat, four-wheeler, or snowmobile. Individuals travel by personal vehicles, snowmobiles, ATV's, skiffs and small planes.

Below is a chart of Capital Projects funded in the Region from January 2008-May 2010. Some projects are funded but have not started or have been completed, but remain on the list showing the types of projects and the award amounts.

Community	Year	Project Description	Jobs Created	Jobs Retained	Agency	Award
<b>Aleknagik</b>	2011	Wood River Bridge			DOT&PF	\$21,803,000
	2011	Float Plane Road			DOT&PF	\$934,000
	2009	ANTHC - AMHTA Funding - Aleknagik			Denali	\$25,000
	2009	Indian Housing Block Grant			HUD	\$122,950
	2008	New Housing Construction			HUD	\$600,000
	2008	Indian Housing Block Grant			HUD	\$110,844
<b>Bristol Bay</b>	2011	Port of Bristol Bay - Improvements Phase II			DCRA	\$5,000,000
<b>Borough</b>	2011	Bear Proof Fencing for Landfill			DCRA	\$60,000
	2010	Alek/Clarks/Ekwok Schools HVAC Upgrades			DEED	\$384,186
	2009	Furniture/Fixtures Monsen Regional Library			DCRA	\$6,384
	2008	Prch Land/Dvlp-Fishman's Dck & Indstrl Pk			DCRA	\$70,671
<b>Chignik</b>	2010	Airport Master Plan Wind Study			DOT&PF	\$0
	2009	Indian Creek Hydro Feasibility Study			AEA-AEEE	\$208,500
	2009	Sewer Improvements - Phase IV			DEC/VSW	\$18,750
	2009	Chignik Harbor Dredging	8	92	Denali	\$1,000,000
	2009	Indian Housing Block Grant			HUD	\$49,715
	2009	Construct Sewage Lift Station			USDA/RD	\$477,000
	2008	Subregional Clinic			Denali	\$1,868,780
	2008	Indian Housing Block Grant			HUD	\$48,660

Community	Year	Project Description	Jobs Created	Jobs Retained	Agency	Award
<b>Chignik</b>	2009	Chignik Lagoon Hydroelectric Final Design			AEA-AEEE	\$151,000
<b>Lagoon</b>	2009	Airport Safety Improvements			DOT&PF	\$4,000,000
	2009	Indian Housing Block Grant			HUD	\$49,715
	2008	Indian Housing Block Grant			HUD	\$48,660
<b>Chignik</b>	2009	Chignik Lake Area Wind-Hydro Final Design			AEA-AEEE	\$375,800
<b>Lake</b>	2009	ANTHC - AMHTA Funding - Chignik Lake			Denali	\$25,000
	2009	Indian Housing Block Grant			HUD	\$63,017
	2008	Indian Housing Block Grant			HUD	\$58,595
<b>Clark's</b>	2009	Indian Housing Block Grant			HUD	\$79,883
<b>Point</b>	2008	Indian Housing Block Grant			HUD	\$72,407
<b>Dillingham</b>	2011	Streets Recon & Rehab/Wood River Rd	9	390	DOT&PF	\$6,742,402
	2010	Lake Elva Hydropower Construction			AEA-AEEE	\$4,006,500
	2010	Replace 5 oil tanks - Kanakanak Hosp			ANTHC	\$41,390
	2010	Water System Improvements, Phase II			DEC/MGL	\$3,090,000
	2010	Wood River Road Reconstruction	21		DOT&PF	\$12,956,300
	2010	Airport Apron & Taxiway Resurfacing			DOT&PF	\$0
	2010	Dillingham: Kanakanak Road Resurfacing	10	245	DOT&PF	\$2,050,000
	2010	3 Bay Chemical Storage Building			DOT&PF	\$0
	2010	City of Dillingham - Tower Road Reconstruc	3	17	Denali	\$925,000
	2009	Power Generation Upgrade / Phase I			AEA-LEG	\$1,000,000
	2009	Remodel Kanakanak EMS area			ANTHC	\$797,500
	2009	Overhaul of medical gas system /oxygen			ANTHC	\$636,896
	2009	Kanakanak Hospital painting and siding			ANTHC	\$466,559
	2009	Bio-waste disposal unit at the Kanakanak			ANTHC	\$311,212
	2009	Water and sewer service to 6 homes - DLG			ANTHC	\$300,000
	2009	Upgrade clean steam generator at hosp			ANTHC	\$154,988
	2009	Construct Tower Road			BIA	\$0
	2009	City shoreline Emergency Bank stabilization			DCRA	\$1,500,000
	2009	DLG High School Fire and Safety Upgrades			DCRA	\$200,000
	2009	Dillingham Health Center			DHSS	\$107,500
	2009	Dillingham Boat Harbor			DOT&PF	\$195,000
	2009	Bulkhead Extension	5	585	EDA	\$1,000,000
	2009	Indian Housing Block Grant - BBNC			HUD	\$2,190,968
	2009	Indian Housing Block Grant - Curyung			HUD	\$599,993
	2008	2009 health facilities master plan for hosp			ANTHC	\$280,812
	2008	Wells & septic systems for 3 homes in DLG			ANTHC	\$214,500
	2008	DLG School EmFire Alarm Sprinkler System			DCRA	\$600,000
	2008	Water System Improvements, Phase II			DEC/MGL	\$1,589,291
	2008	3 Bay Chemical Storage Building			DOT&PF	\$11,750
	2008	Indian Housing Block Grant - BBNC			HUD	\$2,339,619
	2008	Indian Housing Block Grant - Curyung			HUD	\$540,577
<b>Egegik</b>	2011	Design and Control for a New Class A Well			DCRA	\$100,000
	2009	Landfill Fencing			DCRA	\$50,000
	2009	Indian Housing Block Grant			HUD	\$51,537
	2008	Indian Housing Block Grant			HUD	\$48,660

## Bristol Bay Comprehensive Economic Development Strategy

Community	Year	Project Description	Jobs Created	Jobs Retained	Agency	Award
<b>Ekuk</b>	2009	Indian Housing Block Grant			HUD	\$49,715
	2008	Clarks Point Road Reconnaissance			Denali	\$50,000
	2008	Indian Housing Block Grant			HUD	\$48,660
<b>Ekwok</b>	2010	Rehabilitate lift station in Ekwok, Alaska.			ANTHC	\$200,000
	2010	Sewer System Improvements			DEC/VSW	\$91,057
	2010	Ekwok Health Clinic Construction			Denali	\$466,011
	2009	Design/Construct Water & Sewer Facilities			DEC/VSW	\$168,857
	2009	Snow Removal Equipment Building			DOT&PF	\$0
	2009	IRA			Denali	\$34,759
	2009	Indian Housing Block Grant			HUD	\$120,986
	2008	Water & Wastewater Infrastructure Project			DEC/VSW	\$191,440
	2008	Indian Housing Block Grant			HUD	\$107,762
	2008	Design and PER/ER of New Landfill			USDA/RD	\$29,868
<b>Igiugig</b>	2011	Rural Power Systems Upgrade	8	2	DCRA	\$110,000
	2011	Fuel Delivery Truck	2		DCRA	\$12,000
	2010'	Igiugig Rural Power System Upgrade			Denali	\$1,350,000
	2010	Kvichak River - Ocean & River Energy			AEA-AEEE	\$718,175
	2010	Igiugig health clinic materials PurchaseShip			ANTHC	\$1,831,676
	2010	High Ridge Road, Phase I			BIA	\$0
	2010	Igiugig Primary Care Clinic Construction			Denali	\$660,857
	2010	Igiugig Health Clinic			Denali	\$466,011
	2010	Igiugig High Ridge Court Road Construction			Denali	\$81,000
	2009	Excavator			DCRA	\$50,000
	2009	Indian Housing Block Grant			HUD	\$49,715
	2008	Igiugig -Skid Steer/Forklift/ Dozer/Backhoe			DCRA	\$50,000
	2008	Indian Housing Block Grant			HUD	\$48,660
	2008	Design and PER/ER New Water System			USDA/RD	\$250,570
<b>Iliamna</b>	2011	Village Community Hall Renovations	4	4	DCRA	\$72,000
	2009	Indian Housing Block Grant			HUD	\$49,715
	2008	Community Freezer &Laundromat Facility			DCRA	\$75,000
	2008	SnwRemovalEquip/SandChemlStrge/OffBldg	8	2	DOT&PF	\$1,150,000
	2008	Indian Housing Block Grant			HUD	\$48,660
<b>Ivanof Bay</b>	2009	Indian Housing Block Grant			HUD	\$49,715
	2008	Indian Housing Block Grant			HUD	\$48,660
<b>Kanatak</b>	2009	Indian Housing Block Grant			HUD	\$49,715
	2008	Indian Housing Block Grant			HUD	\$48,660
<b>King</b>	2010	Apron and Taxiway Resurfacing			DOT&PF	\$0
<b>Salmon</b>	2010	Airport Improvements			DOT&PF	\$0
	2010	School Bus Road Improve/Construction			Denali	\$800,000
	2009	Indian Housing Block Grant			HUD	\$49,715
	2008	Indian Housing Block Grant			HUD	\$48,660
<b>Kokhanok</b>	2011	Multi-purpose Building Design & Feasibility			DCRA	\$30,000
	2009	Kokhanok Wind Diesel			AEA-AEEE	\$14,063
	2009	Water &sewer service lines to one home			ANTHC	\$30,000
	2009	Septic Pumper Truck			DCRA	\$40,000

Community	Year	Project Description	Jobs Created	Jobs Retained	Agency	Award
	2009	Indian Housing Block Grant			HUD	\$124,220
	2008	Water and sewer master plan.			ANTHC	\$100,000
	2008	Indian Housing Block Grant			HUD	\$115,843
<b>Koliganek</b>	2010'	Koliganek Bulk Fuel Facility - Construction			Denali	\$1,100,000
	2009	ANTHC - AMHTA Funding - Koliganek			Denali	\$25,000
	2009	Indian Housing Block Grant			HUD	\$140,626
	2008	Bulk Fuel Facility	7	2	AEA-BF	\$100,000
	2008	Indian Housing Block Grant			HUD	\$125,572
<b>Lake &amp; Pen Borough</b>	2009	Area wide School Supplies & Equipment			DCRA	\$60,000
	2008	Black Lake Research and Rehabilitation Proj			DCRA	\$76,444
	2008	Area wide School Supplies and Equipment			DCRA	\$60,000
<b>Levelock</b>	2011	Heavy Equipment Purchase		2	DCRA	\$50,000
	2009	Septic Pumping Equipment			DCRA	\$43,000
	2009	Levelock IRA			Denali	\$38,066
	2009	ANTHC - AMHTA Funding - Levelock			Denali	\$25,000
	2009	Indian Housing Block Grant			HUD	\$84,695
	2008	Rural Power System Upgrade - Final Design			AEA-RPSU	\$60,979
	2008	Levelock Clinic Construction, AN07-GJ6			Denali	\$1,413,425
	2008	Indian Housing Block Grant			HUD	\$78,863
<b>Manokotak</b>	2010	Water & Sewer Disposal /Distribution Impr			DEC/VSW	\$215,164
	2010	Upgrade Water & Sewer Plan & Source Stdy			DEC/VSW	\$47,250
	2009	Design/Construct Water & Sewer Facilities			DEC/VSW	\$384,933
	2009	Update Master Plan & Explora Well Drilling			DEC/VSW	\$47,250
	2009	Manokotak Heights Road			Denali	\$3,500,000
	2009	Manokotak Teacher Housing			Denali	\$1,489,600
	2009	Indian Housing Block Grant			HUD	\$240,509
	2008	Road Construction			BIA	\$0
	2008	Manokotak Solid Waste FY08 Project			Denali	\$92,613
	2008	Indian Housing Block Grant			HUD	\$215,550
	2008	Construct New Landfill and Close Old Site			USDA/RD	\$1,114,000
<b>Naknek</b>	2011	SWAK Rgnl GeothermalEnergy Proj-Phase III			DCRA	\$1,250,000
	2010	School Bus Route Road Improve/Design			Denali	\$150,000
	2009	Water and sewer service in Naknek, Alaska.			ANTHC	\$670,000
	2009	Port of Bristol Bay Dock Expansion/Repair			DCRA	\$1,500,000
	2009	Dock Equipment	4	236	EDA	\$2,240,000
	2009	Indian Housing Block Grant			HUD	\$114,041
	2008	H Duty Dock for Fishing Industry/Freight	4	235	EDA	\$1,700,000
	2008	Indian Housing Block Grant			HUD	\$104,190
<b>New Stuyahok</b>	2010	Construction of a new family services			ANTHC	\$4,116,135
	2010	Sewer service in New Stuyahok, Alaska.	9	3	ANTHC	\$397,040
	2010	Family Services Center Construction			Denali	\$1,917,049
	2010	Rural Power System Upgrade - Design			Denali	\$75,000
	2010	AMHTA Match - Behavioral Health Space			Denali	\$50,000
	2009	Completion of sewage lagoon			ANTHC	\$336,253
	2009	CommunityHealthClin&FmlyResourceCenter			DCRA	\$850,000

## Bristol Bay Comprehensive Economic Development Strategy

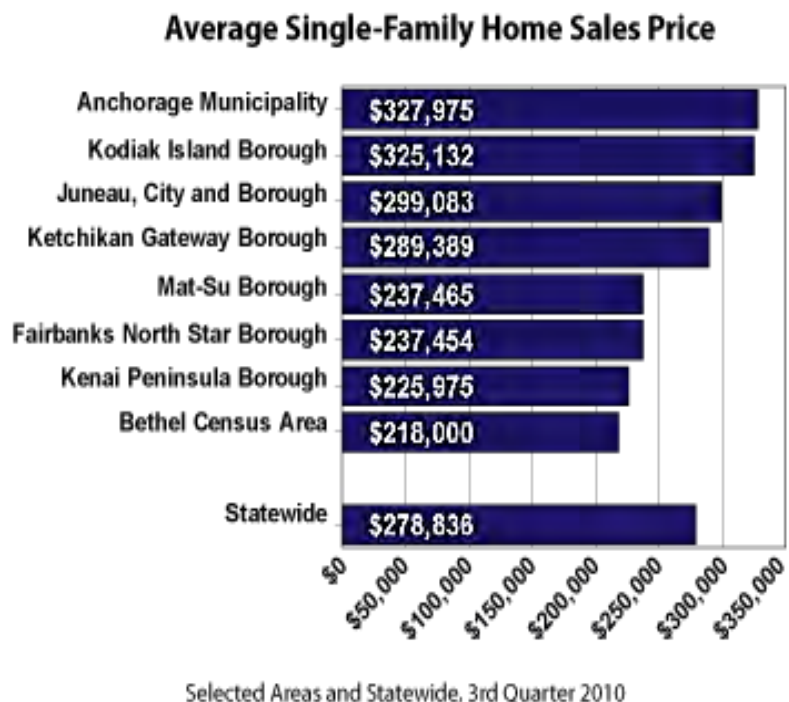
Community	Year	Project Description	Jobs Created	Jobs Retained	Agency	Award
	2009	Bulk Fuel Facility			Denali	\$7,965,000
	2009	Power Plant Pad Construction			Denali	\$315,000
	2009	Indian Housing Block Grant			HUD	\$303,437
	2008	Rural Teacher Housing- Phase II			AHFC	\$0
	2008	Complete sewage lagoon improvements.			ANTHC	\$529,000
	2008	Rural Teacher Housing			Denali	\$559,067
	2008	Indian Housing Block Grant			HUD	\$273,149
<b>Newhalen</b>	2011	Fire Truck Purchase			DCRA	\$50,000
	2009	Septic Pumper Truck			DCRA	\$130,000
	2009	Indian Housing Block Grant			HUD	\$66,327
	2008	Road Improvements			DCRA	\$10,000
	2008	Indian Housing Block Grant			HUD	\$61,714
<b>Nondalton</b>	2009	ANTHC - AMHTA Funding - Nondalton			Denali	\$25,000
	2009	Indian Housing Block Grant			HUD	\$148,614
	2008	NONDALTON - Water Treatment Plant			ANTHC	\$1,259,940
	2008	Indian Housing Block Grant			HUD	\$139,082
<b>Pedro Bay</b>	2011	Hydroelectric Feasibility and Planning	1		DCRA	\$75,000
	2009	Indian Housing Block Grant			HUD	\$49,715
	2008	Old School Demolition			DEED	\$350,000
	2008	Indian Housing Block Grant			HUD	\$51,926
<b>Perryville</b>	2010	Barge Landing - Design and Construction	1	12	Denali	\$1,000,000
	2009	Primary Care Clinic & Multipurpose Building			Denali	\$144,650
	2009	ANTHC - AMHTA Funding - Perryville			Denali	\$25,000
	2009	Indian Housing Block Grant			HUD	\$70,164
	2008	Purchase of Electrical Transformers			AEA-LEG	\$60,000
	2008	Completion of master plan			ANTHC	\$100,000
	2008	Indian Housing Block Grant			HUD	\$64,125
<b>Pilot Point</b>	2010	Water & Sewer Pipe Extension & Upgrades			DEC/VSW	\$150,727
	2009	Design/Construct -Water & Sewer Facilities			DEC/VSW	\$259,684
	2009	ANTHC - AMHTA Funding - Pilot Point			Denali	\$25,000
	2009	Indian Housing Block Grant			HUD	\$56,446
	2008	Clinic Construction			Denali	\$1,683,943
	2008	Dago Creek Road Realignment	7	293	Denali	\$165,000
	2008	Indian Housing Block Grant			HUD	\$51,926
<b>Port</b>	2011	Heavy Equipment Purchase			DCRA	\$250,000
<b>Heiden</b>	2009	Grader & Dozer			DCRA	\$300,000
	2009	Indian Housing Block Grant			HUD	\$49,715
	2008	Port Heiden Road Project			BIA	\$0
	2008	Washeteria Repair/Renovate/Construct	1	159	DEC/VSW	\$802,000
	2008	Indian Housing Block Grant			HUD	\$48,660
<b>Portage</b>	2009	Indian Housing Block Grant			HUD	\$49,715
<b>Creek</b>	2008	Indian Housing Block Grant			HUD	\$48,660
<b>South</b>	2009	Construct Diamond M Road			BIA	\$0
<b>Naknek</b>	2009	Indian Housing Block Grant			HUD	\$68,565
	2008	Indian Housing Block Grant			HUD	\$62,342

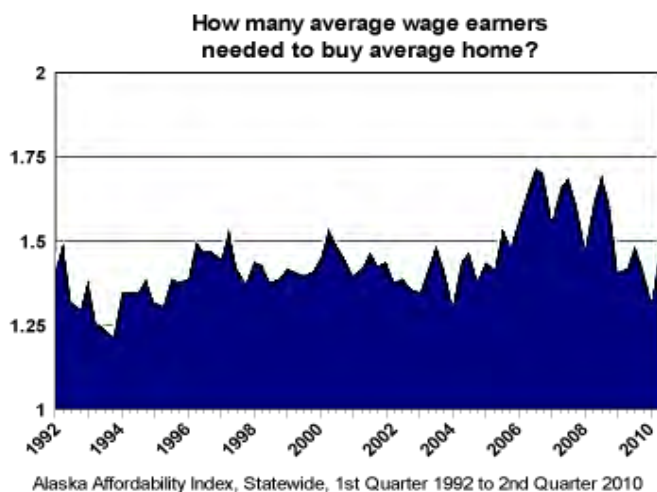
Community	Year	Project Description	Jobs Created	Jobs Retained	Agency	Award
<b>Togiak</b>	2010	Water & sewer service lines in Togiak	8	486	ANTHC	\$150,000
	2010	Rrl Power Sys/Bulk Fuel ConceptDesignRprt			Denali	\$45,000
	2009	Complete Design water & sewer system Up			ANTHC	\$500,000
	2009	Youth Multi-Purpose Facility			DCRA	\$500,000
	2009	Snow Removal Equipment Building			DOT&PF	\$0
	2009	Togiak Senior Housing Project			Denali	\$219,398
	2009	FY2009 Elder Housing Construction			Denali	\$628,511
	2009	BBHA - Togiak Senior Housing Project			Denali	\$146,312
	2009	Indian Housing Block Grant			HUD	\$591,122
	2008	Design of WTP renovation.			ANTHC	\$100,000
	2008	Dust and Break-Up Control			DCRA	\$150,000
	2008	Indian Housing Block Grant			HUD	\$532,960
	2008	Design Water Treatment Plant Upgrades			USDA/RD	\$75,000
<b>Twin Hills</b>	2009	Indian Housing Block Grant			HUD	\$49,715
	2008	Bulk Fuel Facility			AEA-BF	\$0
	2008	Indian Housing Block Grant			HUD	\$48,660
<b>Ugashik</b>	2009	Indian Housing Block Grant			HUD	\$49,715
	2008	Indian Housing Block Grant			HUD	\$48,660
<i>DCED RAPIDS Community Capital Project Database – downloaded May 11, 2011 with added jobs created and jobs retained.</i>						

## Housing

Statewide, according to “Trends” (Aug 2010 Art.), the average single-family home prices have been largely stable. Residential Foreclosures are on the rise but aren’t causing an alarm. Mortgage lending activity peaked in late 2006 and has continued to decline since then. Much of the recent downturn in home sales was offset by a flurry of refinancing activity spurred by low interest rates.

Average home sales prices remained remarkably stable considering the recent drop in mortgage activity. From 2000 to 2010, single-family home sales prices grew about 5 percent per year, and condo sales prices grew about 8 percent per year.





In Bristol Bay, many people cannot afford to buy or build a home. The Bristol Bay Housing Authority's (BBHA's) mission is to eliminate substandard housing conditions through development of local capacities that provide safe, decent and affordable housing opportunities for the Native population of Bristol Bay. Since its founding in 1974, BBHA has built more than 500 units, single family homes and apartments, with funds provided by the U.S.

Department of Housing and Urban Development (HUD)-Office of Native American Programs, the Alaska Housing Finance Corporation (AHFC), and the U.S. Department of Agriculture Rural Development Division (USDA Rural Development).

BBHA uses force accounting and serves as General Contractor hiring local workers to build homes and apartment buildings. A homeowner equity program offers recipients an opportunity to build equity and greater pride in home ownership. There remain hundreds of families on a waiting list for homes, so the job begun in 1974 is far from complete.

In 1996, the Native American Housing Assistance and Self Determination Act (NAHASDA) represented a fundamental change in the way Native American housing programs are administered. Similar to the way compacting has developed between federal agencies and Native Tribes; NAHASDA puts responsibility for program management in the hands of the people most affected. In Alaska, NAHASDA gives local village councils the power to decide how housing dollars will be spent in their community. In Bristol Bay, Tribal councils are using a portion of NAHASDA dollars for weatherization, which helps their members with fuel bills, using local hire, which helps the local economy.

### **Water, Sewer, and Solid Waste Disposal**

In the mid 1960's there was a lack of water and sewer systems and many residents carried drinking water and used honey buckets. The Public Health Service responded to a statewide increase in waterborne illnesses and deaths by launching the installation of individual well and sewer systems. People with homemade systems often built inadequate cesspools without proper separation from water wells. Water wells around 30 feet deep are considered surface water, as acceptable filtration does not occur. High levels of contaminants caused disease. Much progress has been made, but water and sewer projects are still underway in Bristol Bay.

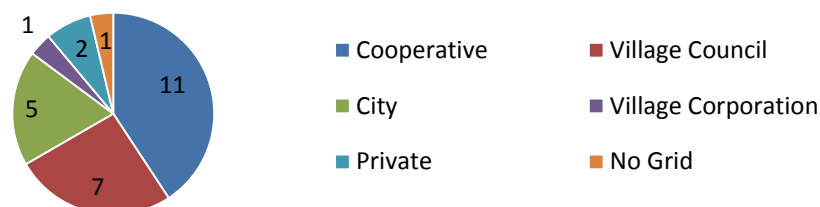
In the past, people dumped their garbage in piles outside of their house. Landfills are being reconstructed that contain the solid waste away from wild animals and are far enough away from villages to prevent disease and pests. Class I-III landfills are now in operation in most villages.

## Energy

### Electricity

Electrical infrastructure in the Bristol Bay region varies by ownership. The vast majority of the communities in the region are part of a Cooperative model where the customers are members of the public utility. The Village Councils, Cities and Village Corporations also own and operate the utilities in the region, and a few are privately owned. The community of Ugashik does not have distributed electric power at the community level.

**Ownership Structure for Bristol Bay Utilities**



This table shows reported kWh sold and generated by community from the *Statistical Report of the Power Cost Equalization (PCE) Program for Fiscal Year 2010*.

Community	Total kWh Sold	Total KWh Generated (diesel)	Total KWh Generated (non-diesel)
Chignik Bay	696,174	751,661	0
Chignik Lagoon	500,013	522,929	21,269
Dillingham/Aleknagik	17,653,542	19,139,350	0
Egegik	627,952	710,000	0
Ekwok	418,320	0	0
Igiugig	157,952	170,081	0
Iliamna/Newhalen/Nondalton	2,387,389	353,490	2,899,517
Kokhanok	397,612	456,666	0
Koliganek	577,915	325,170	0
Levelock	344,564	0	0
Manokotak	1,202,490	1,371,666	0
Naknek/King Salmon/South Naknek	19,619,106	21,192,783	0
New Stuyahok	1,424,952	1,525,143	0
Pedro Bay	230,103	251,209	0
Perryville	336,471	310,080	13,361
Pilot Point	399,618	465,104	5,690
Port Heiden	231,414	0	0
Togiak	2,625,184	2,771,826	0
Twin Hills	191,462	241,763	0

Electricity in Bristol Bay is mostly dependent on fossil fuels, but with the spike in fuel prices in 2008, there has been a greater effort to pursue alternative electrical power sources with many projects under development. According to the AEA, the production capacity of electrical infrastructure in the region is 27,561 kW compared to 1,418,213 kW for the Railbelt. The total net generation for is 45,428 MWh (45,414 MWh from oil; 3 MWh from hydro; and 11 MWh from wind) compared to 5,063,916 MWh (532,208 MWh from oil; 3,635,555 MWh from gas; 388,421 MWh from coal; 505, 831 MWh from hydro; and 1,901 MWh from wind) for the Railbelt. For Bristol Bay this equates to 87,683 barrels of oil. A total of 51,868 MWh were sold in 2010 (14,923 MWh from residential customers; 25,751 MWh from commercial customers; and 11,193 MWh from others) compared to 4,786,304 MWh in the Railbelt. The total electric revenue is \$22,865,000 (\$6,543,000 residential customers; \$11,310,000 commercial customers; and \$5,011,000 others).

### ***Diesel Efficiency***

The Alaska Energy Authority (AEA) with financial support from the Denali Commission, implements energy system upgrades for communities throughout Alaska via the Bulk Fuel and Rural Power Systems Upgrades programs. The Bulk Fuel program provides for repairs, retrofits and upgrades of infrastructure so communities can continue to receive fuel. The Rural Power System Upgrade program provides for powerhouse and electrical distribution upgrades.

<b>Community</b>	<b>Bulk Fuel Upgrade Project</b>	<b>Rural Power Systems Upgrade</b>
Aleknagik	Completed	Completed
Chignik Bay	Completed	Completed
Chignik Lagoon	Completed	Completed
Chignik Lake	Completed	Completed
Clark's Point	Completed	Completed
Egegik	Completed	Completed
Igiugig	Completed	Completed
Kokhanok	Completed	Phase 3 (Construction)
Levelock	Completed	Phase 3 (Construction)
Manokotak	Completed	Phase 1 (Conceptual Design)
Pilot Point	Completed	Remaining
Port Heiden	Completed	Remaining
Twin Hills	Completed	Remaining
Koliganek	Phase 3 (Construction)	Remaining
Perryville	Phase 2 (Final Design)	Remaining
Ivanof Bay	Remaining	Remaining
Naknek	Remaining	Remaining
Newhalen	Remaining	Remaining
Nondalton	Remaining	

*Source: Alaska Energy Authority*

### ***Alternative Energy***

There are eight communities in the Bristol Bay region reporting diesel offset from alternative energy infrastructure already established.

<b>Community</b>	<b>Type</b>	<b>Details</b>
Perryville	Wind (2009)	(10) 2.4 kW Skystream; 13,361 KWh Non-Diesel 4% Offset
Pilot Point	Wind (2004)	(2) 10 kW Bergey; 5,690 kWh Non-Diesel; 1.4% Offset
Port Heiden	Wind (2004)	(1) 10 kW Bergey
Ugashik	Wind/Solar	(2) 2.5 kW Proven; (1) 2.2 kW Solar PV
Iliamna-Newhalen-Nondalton	Hydro(Tazimina, 1998)	824 kW (capable of 1.4 MW); 2,899,517 kWh Non-Diesel; 121% Offset

The high oil prices in 2008 provided incentive for electric utilities and governments in Bristol Bay to pursue alternative energy projects. The most robust program that supports the development of such projects is the Alaska Renewable Energy Grand Fund, a fund set in statute in 2008 via House Bill 152. Several applications from the Bristol Bay region have been submitted to the AEA. The following is a list of applications and project types that have been accepted for funding.

<b>Project Name</b>	<b>Applicant</b>	<b>Type</b>
Lake & Pen Borough Wind Feasibility	Lake & Peninsula Borough	Wind
Chignik Lake Area Wind-Hydro Final Design	Lake & Peninsula Borough	Wind
Lake & Pen Wood Heating Final Design	Lake & Peninsula Borough	Biomass
Indian Creek Hydro Feasibility Study	City of Chignik	Hydro
Lake Elva Hydropower Construction	Nushagak Cooperatives	Hydro
Chignik Lagoon Hydroelectric Final Design	Chignik Lagoon Power Utility	Hydro
Kvichak River	Igiugig Electric Company	Ocean/River
Nushagak Area Hydropower Project	Nushagak Cooperatives	Hydro
New Stuyahok Wind-Feasibility Analysis	Alaska Village Electric Coop.	Wind
Pilot Point Wind Power & Heat	City of Pilot Point	Wind
Port Heiden Wind Turbine Project	Lake & Peninsula Borough	Wind
Lake & Peninsula Wood Boilers	Lake & Peninsula Borough	Biomass
Koliganek Wind & Heat Recovery Feasibility Study	Koliganek Tribal Council	Wind

Other alternative energy projects in the region include the Southwest Alaska Regional Geothermal Energy Project by the Naknek Electric Association (NEA). The association is pursuing a regional geothermal distribution project. In 2010, two 90 kW Vestas V-17 wind turbines were installed in Kokhanok supporting a high penetration system.

### ***Heating***

Currently, heating fuel #1 provides the majority of heating needs for the Bristol Bay region for all sectors: residential, commercial, public and industrial. There are a number of residential homes and commercial operators supplementing space heating with a woody biomass. There are a number of schools utilizing “waste heat” in conjunction with the local utility to provide some space heating. The Bristol Bay Housing Authority (BBHA) supports the installation of wood stoves as a way to supplement or serve as a back-up heating system in residential homes. The Lake and Peninsula Borough is pursuing the installation of wood boilers for community facilities where the resource is reliable.

The Cost of Living section of this document discusses the price of heating fuel #1 and gives examples from around the state and the Bristol Bay region. There is limited information, however, regarding the actual consumption of heating fuel in the state, including the Bristol Bay region.

## COMMUNICATIONS

### Telephone and Cellular Phones

Telephone communications via satellite is available to the region through four telephone utilities: Nushagak Cooperatives, Bristol Bay Telephone Cooperative, Alaska Communication Services, and United Utilities, a GCI owned company. Cellular phones are largely provided by GCI, Inc. The largest community, Dillingham, received cellular service in the fall of 2010, so it is still fairly new. There are many problems with areas with weak service and no signal throughout the region.

### Two-Way Radios

VHF and citizen band radios are still used in most communities for local communications. A two-way radio offers the convenience of announcing public notices and events to a wide audience in a short amount of time.

### Internet

Currently, Internet is provided by the telecommunication providers through satellite, dial-up, and WIFI connections to most of the communities in the region with year around residents through GCI. These systems are slow and often unreliable, which inhibits their use for commerce.

In 2010 GCI received 88 million dollars to bring broadband to rural Alaska. This funding is a part of the American Recovery and Reinvestment Acts goal of delivering high-speed internet to the nation's most distant communities. The project is connecting 65 communities in Southwest Alaska, an area roughly the size of the State of North Dakota, to new or enhanced broadband service by 2012. Presently a network of towers and connections linking villages by satellite service since no access road is available.

The new project called Terra-Southwest operated through a subsidiary company, United Utilities Inc., intends install a fiber optic and microwave grid. The basic plan is to follow the road system out of Anchorage south to Homer, then west across Cook Inlet to Williams Port, then over land to Pedro Bay. The fiber will then enter Lake Iliamna and run submerged to Igiugig alongside the Kvichak River then down to Levelock where the fiber optic system will link into a microwave network that extends to Dillingham and then North. This new system will create jobs and open new business opportunities for e-commerce.

### Television

All Bristol Bay communities receive **Alaska Rural Communications Service (ARCS)**. ARCS, a statewide network of low-powered television stations serves 235 communities throughout rural Alaska. The network is based in Anchorage, Alaska and is operated by

Alaska Public Broadcasting, a joint venture of Alaska Public Media and AlaskaOne, and is beamed via satellite to rural transmitters owned by the State of Alaska.

Programming on ARCS is a selection from five broadcast networks (NBC, CBS, ABC, Fox, MyNetworkTV) and syndication, via Anchorage stations; plus PBS programming from AlaskaOne and KAKM. There is currently no CW programming available on ARCS.

Anchorage stations provide their programming to ARCS free of charge with the condition that advertising is allowed to remain in the content. Even though much of ARCS's programming contains commercials, the operation of ARCS is partially funded by donations from its viewers, just like member stations of PBS.

Dillingham/Aleknagik and Naknek/King Salmon have cable television available through a local provider.

### Radio

There are two radio stations operated out of Dillingham, KDLG Public Radio on AM and FM; and KRUP, a privately owned FM station. Bay Broadcasting operates a FM station out of Naknek.

In 1974, the first regional AM radio station for the Bristol Bay region was built by the Dillingham City School District under an educational grant. **KDLG** operating at 670 kHz continues to provide education, entertainment, weather and important safety information to the fishing fleet and the surrounding communities. It is part of the National Public Radio (NPR) and Alaska Public Radio Network (APRN). They added programming at 89.9 FM within the past year. There is live streaming and other sources of information available on their website at [www.kdlg.org](http://www.kdlg.org).

**KRUP** is a commercial radio station with country music and talk programming broadcasting on 99.1 FM from Dillingham, Alaska.

**KAKN** is a radio station operated by Bay Broadcasting at FM 100.9 serving the Bristol Bay area for more than 20 years. They are a ministry of the Association of Free Lutheran Congregations (AFLC) Home Missions. They were formerly a part of the Lutheran Mission Societies. KAKN has a website at [www.kaknradio.org](http://www.kaknradio.org).

### Mail Service

Mail is flown into the hub communities of Dillingham, Iliamna, and King Salmon six days a week and transferred to the outlying communities by small plane. Local air taxis contract for the Mail service and deliver as weather permits. Some small communities are scheduled to receive mail three times a week, but carriers do not transport the mail if the weather is bad or they do not have enough mail to warrant a trip.

The small rural communities of Bristol Bay are not connected to the road system. As a result, the post offices are where people receive prescriptions and food, conduct business and banking, and connect with family and friends. The U.S Postal Service announced in July 2011 that was studying over 3,600 offices for possible closure; with 36 of those in Alaska. Alaska's Congressional Delegation intervened on the behalf of rural Alaska. Senator Lisa Murkowski wrote in the Anchorage Daily News:

"The Founding Fathers required Congress in the U.S. Constitution to "establish Post Offices and post Roads" because even in the nation's infancy they realized the imperative of the mail for our culture and economy. . . . And the concept of universal service is not a debating point; it's federal law. Mail is "a basic and fundamental service" and Congress requires the Postal Service to "provide prompt, reliable, and efficient services to patrons in all areas and shall render Postal Services to all communities" and must establish rates "on a fair and equitable basis." This means the Postal Service must provide universal service at universal rates -- and that has been the reasoning behind the USPS funding Alaska's bypass mail. . . . Bypass mail allows supplies ordered . . . in rural Alaska to be shipped economically and efficiently from Anchorage and Fairbanks to [rural] communities . . . . These shipments literally "bypass" the U.S. Postal Service, as the shipper sends the order directly to the cargo air carrier, which flies it to its destination. This process saves the Postal Service from having to pay for facilities, labor and equipment to sort these packages and send them on their way. It's the efficient answer to Alaska's challenging mail routes." (*"Bypass mail benefits more of Alaska than just the Bush," ADN Points of view*, by Sen. Lisa Murkowski, Published: 9/30/2011)

In response to the special situation in rural Alaska, the Postal Service reversed its decision to close any post offices in rural Alaska.

## REGIONAL ECONOMY

### Employment Rates in the Bristol Bay Region

According to the 2010 Census the Bristol Bay Borough has a total population of 682 with a total working age residents of 333. The Lake and Peninsula Borough has a total of 1,399 with a total working age residents of 539, and the Dillingham Census Area a total population of 4,946, with a workforce of 2,038.

The preliminary, not seasonally adjusted, unemployment rate for the Bristol Bay Region for February 2011 was 11.77%. The comparable statewide unemployment rate was 8.5% and the U.S. unemployment rate was 8.9% for the same time period.

### Employment Opportunities and Growth Industries

The following data shows employment statistics in the top occupations by local/non-local, by gender, and age for the three Borough/Census Areas. The Alaska Gasline Inducement Act (**AGIA**) jobs are indicated as core occupations for the Alaska Gasline, but also indicate a possible workforce for other construction projects within the region. **Top Jobs** indicates occupations within the region with a high growth rate, numerous job openings with an above average wage.

### Fast Growing Industries in the Region

Fast growing industries that provide numerous jobs and will demand more workers in the near future.

- **Construction Industry jobs** including laborers and carpenters are high in demand.
- **Maintenance and repair services** industry needs skilled workers in growing demand.
- **Heavy Equipment operators** are needed for groundwork on construction projects and for road maintenance.
- **General and operational managers** are needed in a variety of fields.
- **Teachers** at multiple levels are in steady demand.
- **Commercial air taxi pilots** are needed.
- **Certified Aircraft mechanics** are required to repair the planes.
- **Entrepreneurs** are in demand to invest in new small businesses.
- **Tourism related small business entrepreneurship** is in demand.

**Dillingham Census Area Top Occupations**  (comprehensive list)

	Those Who <b>Live</b> in the Dillingham Census Area 2009			Those Who <b>Work</b> in Dillingham Census Area 2008	
	Number employed	Percent female	Age 50+	% Non- local	% Non- Alaska Residents
Teacher Assistants	141	76.6%	41	5.3%	4.1%
Laborers and Freight, Stock, and Material Movers, Hand <b>AGIA</b>	85	8.2%	15	4.0%	22.4%
Secretaries, Except Legal, Medical, and Executive	67	95.5%	10	9.9%	7.0%
Cashiers	58	69.0%	7	10.8%	8.1%
Janitors and Cleaners, Except Maids and Housekeeping Cleaners <b>AGIA</b>	54	25.9%	17	5.8%	20.3%
Stock Clerks and Order Fillers <b>AGIA</b>	52	32.7%	9	4.3%	10.1%
Construction Laborers <b>AGIA TOP JOB</b>	48	10.4%	7	4.8%	9.5%
Managers, All Other <b>AGIA</b>	46	63.0%	24	6.8%	8.2%
Elementary School Teachers, Except Special Education <b>TOP JOB</b>	46	82.6%	21	5.7%	9.4%
Personal and Home Care Aides	42	69.0%	12	10.3%	2.6%
Healthcare Support Workers, All Other	41	85.4%	9	55.3%	0.0%
Retail Salespersons	40	65.0%	4	6.0%	8.0%
Personal Care and Service Workers, All Other	40	90.0%	13	20.0%	10.0%
Carpenters <b>AGIA TOP JOB</b>	37	0.0%	9	24.2%	12.1%
Office and Administrative Support Workers, All Other <b>AGIA</b>	36	61.1%	10	14.3%	14.3%
Receptionists and Information Clerks <b>AGIA</b>	34	85.3%	7	9.1%	18.2%
Maids and Housekeeping Cleaners <b>AGIA</b>	33	63.6%	16	11.7%	50.6%
Bookkeeping, Accounting, and Auditing Clerks <b>AGIA</b>	33	87.9%	9	0.0%	11.9%
Maintenance and Repair Workers, General <b>AGIA TOP JOB</b>	31	0.0%	10	7.7%	17.9%
Meat, Poultry, and Fish Cutters and Trimmers	28	50.0%	2	4.9%	87.6%

**Dillingham Census Area Workers by Industry**

	Those Who <b>Live</b> in Dillingham Census Area 2009			Those Who <b>Work</b> in Dillingham Census Area 2008	
	Number employed	Percent female	Age 50+	% Non- local	% Non-Alaska Residents
Natural Resources and Mining	28	3.6%	1	21.1%	42.1%
Construction	38	5.3%	11	38.9%	29.2%
Manufacturing	39	51.3%	9	3.8%	86.2%
Trade, Transportation and Utilities	328	43.9%	71	13.6%	12.4%
Information	38	36.8%	14	10.7%	16.1%
Financial Activities	133	29.3%	33	9.3%	10.9%
Professional and Business Services	28	50.0%	7	9.7%	58.1%
Educational and Health Services	374	71.4%	117	19.6%	11.1%
Leisure and Hospitality	40	55.0%	12	5.6%	79.9%
State Government	110	51.8%	45	19.3%	8.9%
Local Government	765	47.6%	226	12.1%	8.0%
Other	186	72.0%	53	22.7%	9.1%

**Dillingham Census Area Top Employers** (ranked by number of workers)

- Bristol Bay Area Health Corporation
- Southwest Region Schools
- Bristol Bay Native Association
- Dillingham City School District
- Bristol Bay Housing Authority
- State of AK (excludes U of A)
- AK Commercial Co
- Omni Enterprises Inc.
- Dillingham, City of
- University of Alaska-Fairbanks, Bristol Bay Campus

## Bristol Bay Borough Top Occupations (comprehensive list)


	Those Who <b>Live</b> in the Bristol Bay Borough 2009			Those Who <b>Work</b> in Bristol Bay Borough 2008	
	Number employed	Percent female	Age 50+	% Non-local	% Non-Alaska Residents
Office Clerks, General <b>AGIA</b>	22	77.3%	6	18.8%	46.9%
Retail Salespersons	21	57.1%	3	21.1%	26.3%
Production Workers, All Other	16	0.0%	4	1.9%	97.7%
Teachers and Instructors, All Other	16	56.2%	4	5.9%	23.5%
Carpenters <b>AGIA TOP JOB</b>	15	26.7%	8	5.3%	63.2%
Maintenance & Repair Workers, General <b>AGIA TOP JOB</b>	15	26.7%	10	17.2%	51.7%
Laborers and Freight, Stock, and Material Movers, Hand <b>AGIA</b>	14	21.4%	2	26.8%	56.1%
Operating Engineers & Const Equip Operators <b>AGIA TOP JOB</b>	11	0.0%	1	45.6%	21.1%
Construction Laborers <b>AGIA TOP JOB</b>	11	9.1%	4	71.9%	21.9%
Aircraft Mechanics and Service Technicians <b>TOP JOB</b>	10	0.0%	3	0.0%	40.0%
Bookkeeping, Accounting, and Auditing Clerks <b>AGIA</b>	10	90.0%	7	12.5%	41.7%
Reservation & Transportation Ticket Agents & Travel Clerks	9	100.0%	2	n/a	n/a
Janitors & Cleaners, Except Maids & Housekeeping <b>AGIA</b>	9	66.7%	4	12.5%	45.8%
Shipping, Receiving, and Traffic Clerks	9	11.1%	1	0.0%	25.0%
Maids and Housekeeping Cleaners <b>AGIA</b>	9	100.0%	5	9.8%	70.7%
Healthcare Support Workers, All Other	8	75.0%	2	0.0%	0.0%
Teacher Assistants	8	100.0%	4	11.1%	0.0%
Airline Pilots, Copilots, and Flight Engineers <b>TOP JOB</b>	8	0.0%	4	16.7%	16.7%
General and Operations Managers <b>TOP JOB</b>	8	37.5%	4	34.6%	26.9%
Office & Administrative Support Workers, All Other <b>AGIA</b>	7	71.4%	2	30.0%	50.0%
Customer Service Representatives	7	85.7%	2	0.0%	0.0%
Elementary School Teachers, Except Special Ed <b>TOP JOB</b>	7	71.4%	2	0.0%	12.5%

## Bristol Bay Borough Workers by Industry

	Those Who <b>Live</b> in the Bristol Bay Borough 2009			Those Who <b>Work</b> in Bristol Bay Borough 2008	
	Number employed	Percent female	Age 50+	% Non-local	% Non-Alaska Residents
Natural Resources and Mining	*	*	*	*	*
Construction	28	17.9%	9	49.7%	30.2%
Manufacturing	33	45.5%	12	9.7%	88.6%
Trade, Transportation and Utilities	131	32.8%	48	19.8%	36.8%
Information	22	45.5%	7	9.1%	9.1%
Financial Activities	20	40.0%	11	20.0%	15.0%
Professional and Business Services	18	50.0%	7	75.2%	16.5%
Educational and Health Services	53	56.6%	26	18.2%	16.7%
Leisure and Hospitality	29	58.6%	7	12.4%	79.3%
State Government	22	36.4%	6	33.3%	19.0%
Local Government	143	56.6%	55	14.1%	8.1%
Other	5	80.0%	0	100.0%	0.0%

## Bristol Bay Borough Top Employers (ranked by number of workers)

- Bristol Bay Borough
- Bristol Bay Borough School
- Peninsula Airways Inc.
- Chugach Support Services Inc.
- Naknek Electric Association Inc.
- Lake and Peninsula School District
- State of AK (excludes U of A)
- Bristol Bay Telephone Coop Inc.

<b>Lake and Peninsula Borough Top Occupations</b>  (comprehensive list)					
	Those Who <b>Live</b> in the Lake & Peninsula Borough (2009)			Those Who <b>Work</b> in Lake & Pen Borough 2008	
	Number employed	Percent female	Age 50+	% Non-local	% Non-Alaska Residents
Construction Laborers <b>AGIA TOP JOB</b>	60	13.3%	15	22.6%	20.8%
Teacher Assistants	56	87.5%	12	8.9%	12.7%
Maintenance & Repair Workers, General <b>AGIA TOP JOB</b>	42	19.0%	14	22.6%	21.7%
Teachers and Instructors, All Other	37	70.3%	12	20.0%	23.1%
Office & Administrative Support Workers, Other <b>AGIA</b>	36	69.4%	12	24.0%	28.0%
Healthcare Support Workers, All Other	36	80.6%	10	n/a	n/a
Janitors & Cleaners, Except Maids & Housekeeping <b>AGIA</b>	35	45.7%	8	20.0%	0.0%
Operating Engineers & Const Equip Operators <b>AGIA TOP JOB</b>	19	10.5%	2	13.3%	0.0%
Laborers & Freight, Stock, and Material Movers, Hand <b>AGIA</b>	17	17.6%	2	17.4%	13.0%
Office Clerks, General <b>AGIA</b>	16	93.8%	7	41.9%	16.1%
Helpers, Construction Trades, All Other <b>AGIA</b>	15	6.7%	3	63.2%	10.5%
Cooks, Institution and Cafeteria <b>AGIA</b>	12	91.7%	7	14.3%	32.1%
Refuse and Recyclable Material Collectors	12	41.7%	2	0.0%	21.4%
General and Operations Managers <b>TOP JOB</b>	11	72.7%	2	38.1%	19.0%
Executive Secretaries & Administrative Assist. <b>AGIA TOP JOB</b>	11	100.0%	1	45.0%	0.0%
Water & Liquid Waste Treatment Operators <b>TOP JOB</b>	10	0.0%	4	20.0%	0.0%
FirstLine Supervisors/Managers/AdminSupport <b>AGIA TOP JOB</b>	10	60.0%	1	14.3%	4.8%
Envrnmntl Science & Protection Tech, Includes Health <b>AGIA</b>	10	10.0%	2	0.0%	12.5%
Carpenters <b>AGIA TOP JOB</b>	10	0.0%	5	53.3%	26.7%
Bookkeeping, Accounting, and Auditing Clerks <b>AGIA</b>	9	66.7%	4	10.0%	10.0%
Postal Service Mail Carriers	9	11.1%	1	n/a	n/a

### Lake and Peninsula Borough Workers by Industry

	Those Who <b>Live</b> in the Lake & Peninsula Borough 2009			Those Who <b>Work</b> in Lake & Peninsula Borough 2008	
	Number employed	Percent female	Age 50+	% Non-local	% Non-Alaska Residents
Natural Resources and Mining	18	0.0%	2	37.4%	43.4%
Construction	35	14.3%	8	52.0%	28.0%
Manufacturing	5	40.0%	3	6.2%	92.8%
Trade, Transportation and Utilities	61	34.4%	15	26.4%	38.8%
Information	7	14.3%	5	0.0%	0.0%
Financial Activities	19	15.8%	6	50.0%	3.3%
Professional and Business Services	63	42.9%	11	59.6%	12.7%
Educational and Health Services	56	80.4%	18	76.2%	4.8%
Leisure and Hospitality	17	47.1%	4	39.1%	59.4%
State Government	8	37.5%	0	58.3%	0.0%
Local Government	437	50.6%	121	20.3%	10.5%
Other	32	56.2%	6	83.3%	0.0%

### Lake and Peninsula Borough Top Employers (ranked by number of workers)

- Lake and Peninsula School District
- Bristol Bay Area Health Corporation
- ILIAMNA Development Corporation
- Bristol Bay Native Association
- Kokhanok Village Council
- Native Council of Port Heiden
- Levelock Village Council
- Pedro Bay Village Council
- Native Village of Perryville
- Chignik Lagoon Village Council

### Workforce Development Services

BBNA Workforce Development (WFD) Center in partnership with the State of Alaska Job Service provides workforce development services within the Bristol Bay region.

**BBNA's WFD** Center assists individual in obtaining employment, training, higher-education, and vocational rehabilitation while providing additional services such as childcare to help participants retain employment. WFD programs focus on assisting participants and their families identify and addressing individual barriers supporting individualized employment goals. Our commitment and success is supported by developing and maintaining positive relationships with area businesses and partnering organizations promoting employment and training opportunities.

#### **BBNA WFD Programs and Services:**

- Employment and Training (ET) for Adults and Youth
- Child Care Development Fund (CCDF)
- Higher Education (HE)
- Adult Vocation Training (AVT)
- Vocational Rehabilitation (VR)
- Temporary Assistance to Needy Families (TANF)
- Low Income Heating Assistance (LIHEAP)
- General Assistance (GA)

BBNA WFD can be reached at 907-842-2262 or 1-888-285-2262 (Fax 907-842-3498) or online at [www.bbna.com](http://www.bbna.com). BBNA Job announcements and applications may be found on the website. The BBNA Workforce Development Center has **Job Clubs** in Dillingham, New Stuyahok, Manokotak and Togiak. Job Club offers a variety of classes promoting self-sufficiency and employment skills including cultural activities.

**Alaska Job Service Job Center** has two staff members in Dillingham to help the Bristol Bay residents find a job and promote job openings around the Bristol Bay area. Contact: Pat or Molly at 1-800-478-5579 or 907-842-5579.

The **State Workforce Investment Act (WIA)** Bristol Bay agent travels to Dillingham to assist residents with training or job relocation services. Contact: Barbara Burton at 1-888-478-5872 or 907-334-2248.

## **NATURAL RESOURCES**

### **Non-commercialized and subsistence resources**

#### ***General Resources***

Bristol Bay is one of the richest regions in the state. This was recognized long ago when the national refuges were established as early as the late 1800s. Much of the region is coastline, and includes tens of thousands square miles of boreal forests, swamps, highlands, and the immense mountain barrier of the southern Alaska/Aleutian Range. Besides the awesome beauty, the region is habitat to a wide variety of flora and fauna.

#### ***Edible Plant and Animal Life***

Alaskan Native populations have hunted and fished a subsistence lifestyle in Bristol Bay for generations. The region has many large mammals, including Caribou, Moose, Brown and Black Bears that are important for subsistence uses. Marine mammals include the spotted fur seal, seal lion, beluga, walrus, and grey whales. Smaller notable animals for fur trapping are the wolves, coyotes, fox, wolverine, beaver, mink, and marten. Fish species include salmon, halibut, lake trout, grayling, Dolly Varden, tom cod, smelt, black fish, pike, and burbot. Other seafood includes razor clams, cockles, mussels, hair crabs, geoducks, and snails. Common land based edible birds are ptarmigan and spruce hens. During the summer months water fowl like ducks, geese and swans migrate to and through the region.

Huckleberries, Blueberries, High and Low-Bush Cranberries, Currents, Salmonberries, Strawberries, Raspberries, and Crowberries flourish all around the region. Varieties of edible plants are utilized like the cow parsnip, arrowhead, mouse food caches, and kelp. There are number of medicinal plants that are also utilized including the wormwood, wooly lousewort, pineapple weed, white willow, white yarrow, cramp bark, and wild rosehips.

#### ***Local Agriculture***

There are a number of people that grow gardens in the region. Some of them grow crops large enough to supplement their income with vegetable sales. Plants that do well in the region include: potatoes, turnips, rutabaga, cabbage, lettuce, kale, radishes, kohlrabi, peas, snap peas, strawberries, chives, rhubarb, and raspberries. Plants that require a greenhouse to grow are tomatoes, carrots, zucchini, squash, pumpkin, corn, and culinary herbs.

### Commercial and Industrial Resources

#### *Seafood Industry*

##### *Salmon*

Bristol Bay has the world's largest sustainable commercial Sockeye salmon fishery and is known as the Salmon Capitol of the World. All five species of salmon, Chinook, Sockeye, Chum, Coho and Pink salmon spawn in the fresh rivers and streams. Tens of millions of salmon return to one small area with a delicate ecosystem. It is referred to as the final place on earth capable of sustaining such massive runs of salmon that return year after year to spawn.

The salmon industry was operated since the first salmon canneries began in the 1800's. In the early days, Alaska Natives were not allowed to fish commercially. Many fishermen came from the Pacific Northwest and every corner of the globe to participate. The commercial salmon industry has seen drastic fluctuations from boom to bust.

Today, commercial fishing is a multi-million dollar industry. The 2010 harvest of all salmon species was 31 million fish with an ex-vessel value of 153 Million dollars. The 70 percent of households in the Region are involved in commercial fishing in one form or another. Commercial fishing should be the mainstay of the Regional economy, but a number of factors have caused the level of local participation to decline. Farmed fish came on the scene in the late 1990's cornering a large slice of the fresh salmon market. Then when the fuel costs soared in the late 2000's, circumstances found some local fishermen heavily in debt. As a consequence, they were forced to sell their limited entry fishing permits.

The **Limited Entry Permit** system was established by constitutional amendment in a statewide primary election on August 22, 1972. When the Bristol Bay Limited Entry Program began, commercial fishers applied on a point system to qualify for a permit. Limited Entry Permits are transferable, have gained considerable market value, creating a financial barrier to free access.

Many Bristol Bay permits are sold due to financial hardships and is leaving local people without a source of income. A recent study shows that when one permit leaves a community; as many as nine families are impacted, including permit holder, crewmen, local suppliers and their families. In today's market, a Bristol Bay Permit sells for \$150,000 to \$200,000. Many residents that want to commercial fish do not have adequate collateral to obtain loans, nor do they have a means to build assets toward purchasing one, due to the lack of local jobs.

##### *Herring*

The Togiak Herring fishery began in the 1970s when market demand increased from Japan due to a decline of their herring stocks. Presently, herring are harvested primarily for sac roe destined for Japanese markets. Purse seines and gillnets are the primary gear types used to catch herring. In addition to fisheries for whole herring, a

number of “spawn-on-kelp” fisheries harvest herring eggs after they are deposited on kelp fronds. Spawn-on-kelp is handpicked at low tide in the intertidal zone in the Togiak district.

### ***Halibut***

Because of Bristol Bay’s remoteness and prime location, it provides a virtual paradise for Halibut. The deeper water offshore is a nursing ground for North Pacific halibut and other species. The area supports large numbers and world class size halibut with some topping the scales at over 400 pounds. A small commercial Halibut fishery and Halibut Charter industry is available to qualified local individuals.

**Bristol Bay 4E CDQ Halibut Fishery** participation is limited to verified residents of the 17 BBEDC CDQ communities. Boats that are used in the fishery must be owned by CDQ community residents and limited to 32-feet or less in length. BBEDC-4E Halibut Permitted Holders use skates of long line gear except in certain areas in and around Togiak Bay north and west of Hagemeister Island. Their catch is limited to 10,000 pounds per trip. Halibut fishers maintain a fishing activities log book and record any sub-legal (under 32-inch) halibut that they retain for personal use. Direct Marketers who sell halibut dockside to the public have a State of Alaska Catcher-Seller Permit (Free from ADF&G), a federal Registered Buyer Permit (free from NOAA), and are registered with the State of Alaska E-landings website.

**Halibut Fishing by Charter** in Bristol Bay provides some of the largest halibut in the state. Popular techniques include jigging and bouncing baits off the bottom in waters of variable depths near structure. Using bait is considered a waste of time and effort due to the high capacity of the fishery.

### ***Industrial Minerals***

Historically, there were small gold claims in the region and one cinnabar ore mine that produced liquid mercury. Currently, there are two large scale mines known as Pebble and Humble being explored.

**Placer Gold Mining** in the Bristol Bay occurred in various areas across the region. Placer mines were used to extract precious material from aggregate materials in a method known as hydraulic mining or sluicing. There are numerous streams flowing into Bristol Bay from Cape Newenham to the west to Lake Clark to the northwest. From the late 1800’s till 1912 and for a few years after World War II, some gold was recovered, but the total amount was probably worth only a few thousand dollars. Additional random mining and prospecting has taken place, but there has been no successful commercial mining activity for many years.

**Cinnabar Mining** took place on Marsh Mountain near Aleknagik as both placer and lode mining operations. Cinnabar was first discovered in 1941 by gold seekers. Cinnabar was mined from 1942 to 1952 by Red Top Mercury Mines, Inc. and shipped for processing elsewhere producing 4 flasks of mercury that was sold to the Defense Mineral Exploration Administration (DMEA).

During 1954 Red Top Mercury Mines built and operated a small retort facility on the east bank of the Wood River. The retort ceased operations in 1955 after producing 26 flasks of mercury. Later, it was leased and the lessor hand sorted and shipped cinnabar ore from the site to Anchorage for processing until 1967.

In 1992 local residents with help from Greenpeace Alaska requested assistance from the Alaska Department of Environmental Conservation (ADEC) to clean up the retort site. The mining claims on Marsh Mountain and the retort site on the Wood River were declared “Abandoned and Void” by BLM in 1994. The cleanup took place in spurts, demolishing and placing debris in totes, and stockpiling leaking drums of “Bunker C” grade fuel oil and contaminated soil. A spring flood in 1998 prompted BLM to take emergency action to remove the hazardous wastes by barge.

On June 27, 1997, the U.S. Environmental Protection Agency (EPA) placed the Site on the Comprehensive Environmental Response, Compensation, and Liabilities Act (CERCLA) Federal Agency Hazardous Waste Compliance Docket. EPA notified BLM on September 10, 1999 that the Hazard Ranking System scoring was not high enough for the Site to be listed on the National Priorities List. The Docket now reflects a No Further Remedial Action Planned status.

BLM continued to address ADEC’s outstanding concerns about the Site, since some residual mercury contamination remained. In 2005, ADEC gave BLM a set of six requirements to gain Conditional Closure of the Site, and BLM has made steps towards addressing these concerns, including removing additional mercury contaminated soil from the site in the summer of 2011. Once Cleanup Complete status is achieved, BLM can convey the Site without obligating the new owner with future monitoring and land use controls.

**Alaska Pebble Mine** project is an extremely large and controversial copper, gold, and molybdenum open pit mine proposed for development within two salmon habitat watersheds. The Pebble prospect is located in an area of wet tundra surrounded by low, rounded mountains approximately 16 miles west of the village of Nondalton. It sits on a drainage divide between Upper Talarik Creek and the Koktuli River, which form the headwaters of two separate rivers draining into Bristol Bay. Frying Pan Lake, located in a proposed tailings storage area at the Pebble site, drains into the Koktuli River, which then joins the Mulchatna and finally the Nushagak River. The Nushagak empties into Bristol Bay near Dillingham. Upper Talarik Creek drains into Lake Iliamna, which empties into Bristol Bay through the Kvichak River. The communities of Nondalton, New Stuyahok, Ekwok, Dillingham, King Salmon, Levelock, Igiugig, Newhalen, Iliamna, Pedro Bay, and Kokhanok lay in the region of the proposed mine, and many are directly downstream of the Pebble site.

**Humble Prospect** (aka Kemuk Mountain prospect) is located approximately 80 km northeast of Dillingham near Kemuk Mountain. Millrock presently holds a 100% interest in the Humble Prospect, but entered into an *Option to Joint Venture Agreement* with a subsidiary of Kinross Gold Corporation. Millrock is targeting a magmatic rock deposit bearing geological, geochemical and geophysical similarities to those of the nearby world-class Pebble Mine copper-gold deposit, which Millrock Vice President, Phil St. George, is credited with discovering in 1988. Signs of a similar deposit include the presence of

magnetite-rich pyroxenite similar in age and character to the adjacent Pebble Mine. Separate airborne ZTEM geophysical surveys were conducted by Geotech over the Humble Prospect, and it is comparable to Pebble Mine. Other geochemical anomalies are also present. Regional reconnaissance conducted by Millrock and funded through a strategic alliance with Altius Resources, Inc. ("Altius") led to acquisition of the mineral rights in 2010. The property consists of 366 State of Alaska mining claims that cover approximately 91.5 square miles. Millrock began exploration in the summer of 2011.

### ***Oil and Gas Industry***

In April 2010, the Obama administration released its new off-shore oil and gas drilling plan that closed Bristol Bay, also known as the North Aleutian Basin, to any lease sales for five years. The Alaska Marine Conservation Council, Bristol Bay Liaison, Dan Strickland, said that protecting the area from drilling does more to help the local economies of the region than the possibility of drilling.

The fishing industry is valued at \$2.5 billion per, which out performs the \$7.7 billion projected oil and gas revenue over the 25 to 40 year life span of the field. Compare that during that same time period, the fisheries will bring in anywhere from \$60 to \$90 billion." These figures include Unalaska's main revenue sources, the Pollock, crab, and ground fish fisheries.

Sixty-six (66) organizations supported the closure, including regional fishing, and Native and Tribal organizations. The Region needs permanent protection, so it doesn't have to revisit the mid-90s buyback commission, and fight this battle over and over again. Protection of the natural resources is a regional priority.

### ***Tourism***

The current emphasis is on Tourism and Ecotourism. With the exception of non-resident owned lodges, little tourism takes place and not enough has been done to involve local participation. Current Lodge owners participate heavily in extraction of big game, including Moose, Bear, Caribou, and fish (including many varieties of Salmon and Trout). The region's potential for a variety of low-impact ecotourism adventures remains viable.

The habitat is pristine, intact and unchanged for thousands of years offering countless breathtaking vistas. The region is bordered by three mountain ranges that feed the many lakes that flow into eight major river systems. The mountainous terrain, low lying tundra, freshwater drainage systems, and coastal landscape lend themselves to activities such as extreme biking, hiking, canoeing, kayaking, bird watching, wildlife viewing, and salmon fishery touring. Sport Fishing is an important component to Bristol Bay; the majority of the 40 commercial lodges in Bristol Bay are owned and operated by non-residents. As Bristol Bay supports the largest runs of wild salmon, trophy rainbow, white fish, grayling, Dolly Varden, Arctic Char and Northern Pike, a vibrant and flourishing sport fishing economy exists.

Statistics show an ever increasing number of requests for tourism in the Bristol Bay region, therefore it is BBNA's position to intercept this notion and secure appropriate funding to allow residents to pursue adequate services for the adventuring public. The high cost of energy prevents residents now from pursuing ventures on their own. The need for additional sources is being investigated by the Tribes.

An excess of \$90 million is generated in Bristol Bay annually in the form of recreation and tourism, taxes and licenses. Of that \$90 million, \$60 million is generated from sport fishing alone; nonresident lodge clients generate the majority of this. A very small percentage of this is spent locally in stores, restaurants, and hotels. As clients are escorted to smaller planes or boats and taken to the lodges.

Recently residents have orchestrated moves to qualify themselves as guides by obtaining the appropriate licenses to operate vessels to carry clients.

### ***Sport fishing***

The watersheds that drain into Bristol Bay support a lucrative and world-famous sport fishery for rainbow trout, and also attract a number of fishermen seeking King Salmon. Alaskan residents hold about two-thirds of the sport fishing permits in the area, but non-residents spend a much larger share of money on the activity. Sport fishing brought in about \$61 million in 2005 to the local economy, but a majority of that money is earned by non-resident owned businesses and taken from the region when the season is over.

Sportfishers are required to get a state sport fishing license and King Salmon tags (if they will be taking King Salmon). The number of salmon sportfishers are allowed to keep is dependent upon the escapement of salmon returning to the rivers, so that sufficient numbers of fish are allowed to spawn to sustain the fish stocks.

## IDENTIFYING REGIONAL PRIORITIES

### Organizing & Collaborating

The Bristol Bay Partnership is a group of the five regional organizations, Bristol Bay Native Corporation (BBNC), Bristol Bay area Health Corporation (BBAHC), Bristol Bay Native Association (BBNA), Bristol Bay Housing Authority (BBHA) and the Bristol Bay Economic Development Corporation (BBEDC). They entered into a Memorandum of Understanding in 2005 to meet regularly and work together on areas of common interest.

### Regional Values Used to Guide Planning

From September 2010 to May 2011, the Bristol Bay Regional Vision Project took the people of Bristol Bay through a visioning process. The Regional Vision project demonstrated unity in the region in regard to peoples' high value for family, subsistence, and land.

### Bristol Bay Regional Vision Statement

**The foundation** of the Bristol Bay Region is committed families, connected to our land and waters.

**We believe** future generations can live healthy and productive lives here. Across our region, we share common values of community, culture, and subsistence.

**We see** a future of educated, creative people who are well prepared for life. This requires:

- Excellent schools
- Safe and healthy families
- Local jobs
- Understanding our cultural values and traditions

**We assert** the importance of local voices in managing our natural resources to continue our way of life.

**We welcome** sustainable economic development that advances the values of Bristol Bay people. Our future includes diverse economic opportunities in businesses and industries based largely on renewable resources. Large development based on renewable and non-renewable resources must not threaten our land, our waters, or our way of life.

**We foster** cooperation among local and regional entities to coordinate infrastructure planning for stronger, more affordable communities. Investments in energy, housing and transportation promote sustainable communities and spur economic development.

**We recognize** the need to locate new sources of capital to implement this vision with a goal of generating self-sustaining regional economies.

**We are unified** to secure a prosperous future.

The Vision Project was sponsored by the Bristol Bay Partnership. The partners selected a consulting firm and recruited eight respected people from throughout the region to serve as Commissioners for the project. The Commissioners traveled with staff and consultants to 27 Bristol Bay communities over a 9 month period to discuss residents' hopes for the future. Each community addressed the same set of questions using electronic voting technology called Consensor™ and took part in conversations. The input was recorded and compiled and forms the basis of the Vision.

As the voice of the people of Bristol Bay, the Vision is intended to be used as a guide to entities, both public and private, including politicians, regulators at the local, state and federal level; and private businesses engaged in the Bristol Bay Region.

All results and documents of the Bristol Bay Regional Vision can be viewed on the project web site at [www.bristolbayvision.org](http://www.bristolbayvision.org).

### **SWOT Analysis**

#### ***Strengths and Opportunities***

The natural attributes of the region are the pristine environment and natural resources, the land and water, the plant and animal life, the abundant salmon, and its people and cultures. Bristol Bay is home of the massive salmon runs that define the culture and socioeconomics of the Region. Tourism potential in the Bristol Bay Region is directly tied to the vast amount of acres and hundred miles of rivers set aside for recreational purposes. In addition, the Region has a rich Alaskan Native cultural heritage.

#### ***Weaknesses and Threats***

The Bristol Bay Region is remote and accessible from Anchorage (Alaska's largest city) by air and barge only. The isolated location and small population translates into a high cost of living. Comparing travel costs, a family of four can travel from the east coast to the west coast, for what one person can travel from Bristol Bay to Anchorage.

Residents are reliant on air freight for mail and supplies, and seafaring barges for building materials, vehicles, construction equipment, and fuel from Seattle or Anchorage. Small barge services to communities along the rivers and lakes have trouble getting fuel in the fall. After the drier summers, the water is low and the barges get stuck on sandbars. In the commercial fishing/construction off season, people's cash flow is low; the Alaska PFD arrives in October, after the marine barges have left Seattle and Anchorage on their final voyages for the season, so many people cannot pre-order fuel and supplies before the winter. There needs to be contingency plans for fuel delivery, so fuel does not have to be air lifted to these communities.

Construction cost per square foot is often triple in Bristol Bay to the continental U.S. or Anchorage.

Lack of infrastructure is a challenge to business development in the Bristol Bay Region. There is a lack of a trained local workforce, marketing expertise, and capital. Distance from major travel corridors and business hubs are also an obstacle, since the

additional cost and time required to travel into the region is a barrier to the typical Alaska visitor. More regional marketing efforts are needed to promote Bristol Bay as a visitor destination.

Commercial fishing limited entry permits are leaving the hands of local people reducing local participation in the fisheries. More efforts to increase the quality and marketing of seafood are needed.

The high fuel costs impede development of facilities and infrastructure. It also threatens existing facilities that are struggling with limited operating and maintenance funds.

The timber industry is nonexistent because of the harsh winter weather and short growing season produces only stunted willow, birch and spruce in scattered clusters.

### **Regional Priorities**

Eight priority projects have been identified that are critical to economic development in the Bristol Bay Region. These projects, and others recommended throughout this report, may require resources that the region does not currently have. For these projects, we have suggested possible collaborations.

Other projects recommended in this report require internal investment. They call for the entire Region to assume a role in economic development. Throughout this strategic planning process, Bristol Bay's leaders have proven that they are committed to economic development. Improving the economic health of the Region requires work from all sectors of the economy. This plan contains ideas for enhancing and creating new initiatives with potential for transforming the region.

This strategy is a roadmap for the region to use that can lead toward a sustained, healthy economy. However, when resources are scarce, the following prioritized project list will assist the region in directing resources to the most critical needs and to areas that will have the biggest impact in the region.

- Construct Lake and Peninsula Borough Wind/Hydro Intertie Project
- Construct residential single-family homes and/or apartment housing units.
- Develop a Visitor's Council that Explores visitor marketing strategies
- Develop a locally generated Bristol Bay Region Visitors Guide
- Construct Aleknagik Wood River Bridge
- Develop multipurpose community/visitor center model plans and construction ready design prototypes
- Construct Naknek Geothermal Project
- Complete Nushagak Cooperative Lake Elva Hydroelectric Feasibility Study (Note: Not located in a salmon spawning stream.)
- Sustainable Fisheries Development to increase the number of local Drift Permit holders.
- Increase value added fish processing capacity.
- Increase utilization of renewable energy sources, like wind and solar.

## REGIONAL GOALS & OBJECTIVES

**Goal I:** The Bristol Bay Region offers **quality of life** for its residents to live, play, subsist and work, and it is appealing for young professionals and individuals returning for employment with target industry companies.

*Objective 1:* Implementing Wellness programs to address substance abuse and/or domestic violence/abuse/neglect healing individuals that move out of dysfunction and into the workforce.

*Objective 2:* Updating the Bristol Bay Energy Policy & Plan and developing energy efficiency and alternative energy projects to reduce costs and help to make the region an affordable place to live.

*Objective 3:* Developing more affordable housing that meets the desires of the residents.

**Goal II:** **Land and waters** are protected to sustain the subsistence lifestyle.

*Objective 1:* Encouraging local people participate in regional land use planning.

*Objective 2:* Encouraging Local participation in fish and game management on advisory councils and identifying contacts.

*Objective 3:* Developing and maintaining a Subsistence Facebook page.

*Objective 4:* Increasing the knowledge and involvement of local people in environmental issues and processes.

**Goal III:** **Workforce development and education** programs prepare the regional workforce for Bristol Bay's target industries.

*Objective 1:* Streamlining programs and services, and leveraging funds through partnerships that provide people with better quality service.

*Objective 2:* Providing training for local participation in fast growing industries.

*Objective 3:* Providing culture camps and culture/nature kits to increase cultural awareness.

*Objective 4:* Providing childcare to assist parents that want to obtain training or employment.

**Goal IV:** **Sustainable economic development** is based largely on renewable resources and large development based on non-renewables does not threaten land and waters.

*Objective 1:* Encouraging entrepreneurship and small business ownerships to grow and diversify the Bristol Bay economy and bring new investment and resources into the Region.

*Objective 2:* Developing a Bristol Bay proactive targeted marketing campaign to increase tourism.

*Objective 3:* Providing increased local access to limited entry fishing permits.

*Objective 4:* Providing programs that aim to enhance the quality of fish.

**Goal V:** Bristol Bay's **infrastructure** meets the needs of target industries and resident population.

*Objective 1:* Constructing the Aleknagik Wood River Bridge as a step in the process toward the Alaska Long Range Southwest Alaska Transportation Plan with access to ferries in Cook Inlet.

*Objective 2:* Developing construction ready design prototypes for community/cultural centers.

## IMPLEMENTATION ACTION PLAN

Items by Category	Timeline	Entity
<b>Quality of Life</b>		
<b><i>Healthy Communities</i></b>		
Establishing a Bristol Bay Regional Elders Council.	2012-17	BBs
Implementing the Bristol Bay Wellness Initiative Strategic Plan.	2012-17	BBNA-WI
<b><i>Housing</i></b>		
Constructing residential single-family homes and/or apartment units, using local and other resources that meet resident's desires.	2016	BBHA
<b><i>Energy</i></b>		
Updating the Bristol Bay Energy Policy & Plan and developing alternative energy projects.	2013	BBNA-TE
<b>Land and Waters</b>		
<b><i>Subsistence</i></b>		
Ensuring local participation on state and federal advisory councils.	2012-17	BBNA-NR
Maintaining participation on advisory boards and identifying contacts on Advisory Boards to communicate concerns.	2012-17	BBNA-NR
Requesting ADF&G hold meetings that affect Bristol Bay in-region.	2012-17	BBNA-NR
Developing and maintaining a Subsistence Facebook page	2012-17	BBNA-NR
<b><i>Environmental Issues</i></b>		
Increasing involvement in Environmental Impact Study processes.	2012-17	BBs
Providing environmental related classes to increase understanding of the NEPA processes and environmentally related classes for upcoming development efforts hosted in various communities.	2012-17	BBNA-NR BBNC/BBC BBEDC
<b>Workforce Development and Education</b>		
<b><i>Education and Training</i></b>		
Streamlining individualized plans to access programs & services across multiple agencies improving quality of services & reducing barriers. Building new and creative work experience sites to enhance learning experiences. Leveraging funding for long term stability and growth. Training for Identified Fast Growing Industries (See XIII 3)	2012-17	BBNA-WF BBC/SAVEC Schools BBAHC State Federal
Developing grant writer project with village trainees and establish a Regional grant writer's team	2012-17	BBNA BBC
Placing internships and apprentices in the villages	2012-17	BBNC
Maximizing local hire by following existing tools for working collaboratively in communities (Contact L&PB)	2012	BBNA-WF, ED
Collaborating and developing a culture campus.	2012-2015	BBNA-WF/NR
Developing and utilizing "culture/nature kits" that circulate through the schools, museums, libraries, etc.	2013>	BBNA-WF/NR Schools

Providing childcare assistance to eligible parents and helping home-based childcare providers.	2012-17	BBNA-WF
<b>Sustainable Economic Development</b>		
<b><i>Business Development</i></b>		
Developing a Native CDFI to provide small business and job related development services and financial products	2012	BBNA-ED
<b><i>Tourism Industry Development</i></b>		
Developing a locally generated Bristol Bay Region Visitors Guide	2012	BBNA-ED
Developing a Visitor's Council that Explores additional visitor marketing strategies	2012	BBNA-ED
Providing Tourism Conferences with Workshops	2013	BBNA-ED
<b><i>Commercial Fishing</i></b>		
Increasing local access to limited entry permits by improving Loan Guarantee Program	2012-17	BBEDC
Enhancing quality of fish so demand and price increase by improving icing, slush bag, fish hold modification, and refrigeration programs	2012-17	BBEDC
Developing and implementing an Emergency Transfer program	2012-17	BBEDC
<b>Infrastructure</b>		
<b><i>Transportation</i></b>		
Aleknagik Wood River Bridge	2012	ADOT
<b><i>Utilities</i></b>		
Naknek Geothermal Project	2016	NEA
Lake and Pen Borough Wind/Hydro Intertie Project	2016	L&PB
Nushagak Cooperative Lake Elva hydroelectric Feasibility project	2015	NUSH
<b><i>Communications Infrastructure</i></b>		
Completing GCI Terra Southwest project	2012	GCI
<b><i>Community Facilities</i></b>		
Developing model feasibility plan and construction ready design prototypes for multipurpose community/visitor centers	2014	BBNA-ED

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